

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

DUOS TECHNOLOGIES GROUP, INC.

(Exact name of registrant as specified in its charter)

Florida

*(State or other jurisdiction of
incorporation or organization)*

65-0493217

*(I.R.S. Employer
Identification Number)*

**7660 Centurion Parkway, Suite 100
Jacksonville, Florida 32256
(904) 296-2807**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Andrew W. Murphy
Duos Technologies Group, Inc.
7660 Centurion Parkway, Suite 100
Jacksonville, Florida 32256
(904) 296-2807**

(Address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**J. Thomas Cookson, Esq.
Shutts & Bowen LLP
200 South Biscayne Boulevard, Suite 4100
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Tel. No.: (305) 358-6300
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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: From time to time on or after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. "

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective on filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. "

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. "

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated June 12, 2023.

PROSPECTUS

duostech™

DUOS TECHNOLOGIES GROUP, INC.

\$50,000,000

Common Stock

**Preferred Stock
Debt Securities
Warrants
Rights
Units**

We may offer and sell up to \$50 million in the aggregate of the securities identified above from time to time in one or more offerings. This prospectus provides you with a general description of the securities that may be offered.

Each time we offer and sell securities, we will provide a supplement to this prospectus that contains specific information about the offering and the amounts, prices, and terms of the securities. The supplement may also add, update, or change information contained in this prospectus with respect to that offering. You should carefully read this prospectus and the applicable prospectus supplement before you invest in any of our securities.

We may offer and sell the securities described in this prospectus and any prospectus supplement to or through one or more underwriters, dealers, and agents, or directly to purchasers, or through a combination of these methods. If any underwriters, dealers, or agents are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. See the sections of this prospectus entitled “About this Prospectus” and “Plan of Distribution” for more information. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of such securities.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE THE “RISK FACTORS” ON PAGE 8 OF THIS PROSPECTUS AND ANY SIMILAR SECTION CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR SECURITIES.

Our common stock is listed on The NASDAQ Capital Market under the symbol “DUOT”. On June 7, 2023, the last reported sale price of our common stock on The NASDAQ Capital Market was \$5.32 per share.

The aggregate market value of our outstanding common stock held by non-affiliates is \$23,409,399 based on 7,169,339 shares issued and 7,168,015 shares of outstanding common stock, of which 2,767,752 are held by affiliates, and a price of \$5.32 per share, which was the last reported sale price of our common stock on The Nasdaq Capital Market on June 7, 2023. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell our common stock in a public primary offering with a value that exceeds more than one-third of our public float in any 12-month period so long as our public float remains below \$75,000,000. We have not offered any securities pursuant to General Instruction I.B.6. of Form S-3 during the prior 12 calendar month period that ends on and includes the date of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____, 2023.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission, or the SEC, using a “shelf” registration process. By using a shelf registration statement, we may sell securities from time to time and in one or more offerings up to a total dollar amount of \$50 million as described in this prospectus. Each time that we offer and sell securities, we will provide a prospectus supplement to this prospectus that contains specific information about the securities being offered and sold and the specific terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement, you should rely on the prospectus supplement. Before purchasing any securities, you should carefully read both this prospectus and the applicable prospectus supplement, together with the additional information described under the heading “Where You Can Find More Information; Incorporation by Reference.”

We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We will not make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and the applicable prospectus supplement to this prospectus is accurate as of the date on its respective cover, and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates.

When we refer to “Duos,” “we,” “our,” “us” and the “Company” in this prospectus, we mean Duos Technologies Group, Inc., unless otherwise specified. When we refer to “you,” we mean the holders of the applicable series of securities.

WHERE YOU CAN FIND MORE INFORMATION; INCORPORATION BY REFERENCE

Available Information

We file reports, proxy statements and other information with the SEC. Information filed with the SEC by us can be inspected and copied at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of this information by mail from the Public Reference Room of the SEC at prescribed rates. Further information on the operation of the SEC's Public Reference Room in Washington, D.C. can be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is <http://www.sec.gov>.

Our website address is <https://www.duostech.com>. The information on our website, however, is not, and should not be deemed to be, a part of this prospectus.

This prospectus and any prospectus supplement are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Forms of the documents establishing the terms of the offered securities are or may be filed as exhibits to the registration statement. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement at the SEC's Public Reference Room in Washington, D.C. or through the SEC's website, as provided above.

Incorporation by Reference

The SEC's rules allow us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or replaces that statement.

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We incorporate by reference our documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, which we refer to as the "Exchange Act" in this prospectus, after the initial registration statement and prior to the effectiveness of the registration statement as well as on or after the date of this prospectus and prior to the termination of the offering of the securities described in this prospectus. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed below or filed in the future, that are not deemed "filed" with the SEC, including any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC:

- Our Annual Report on [Form 10-K](#) for the year ended December 31, 2022, filed with the SEC on March 31, 2023.
- Our Quarterly Report on [Form 10-Q](#) for the quarter ended March 31, 2023, filed with the SEC on May 15, 2023.
- Our Current Reports on Form 8-K filed with the SEC on [January 3, 2023](#), [March 29, 2023](#) and [May 19, 2023](#).
- The description of our Common Stock contained in [Exhibit 4.4](#) to our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 31, 2022, and any amendment or report filed with the SEC for the purpose of updating the description.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

For purposes of the registration statement of which this prospectus is a part, any statement contained in a document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated herein by reference modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of the registration statement of which this prospectus is a part.

You may request a free copy of any of the documents incorporated by reference in this prospectus (other than exhibits, unless they are specifically incorporated by reference in the documents) by writing or telephoning us at the following address:

Duos Technologies Group, Inc.
7660 Centurion Parkway, Suite 100
Jacksonville, Florida 32256
(904) 294-2807

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus and any accompanying prospectus supplement.

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THE COMPANY

Overview

The Company, operating under its brand name **duostech**, develops and deploys technology systems with focus on inspecting and evaluating moving vehicles. Its technology focus is within the Vision Technology market sector and, more specifically, the Machine Vision subsector. Machine Vision companies provide imaging-based automatic inspection and analysis for process control for industry with potential expansion into other markets. Duos has developed key technologies over the past several years in software, industry specific hardware and artificial intelligence and has demonstrated industrial strength usability of its systems supporting rail, logistics and intermodal businesses that streamline operations, improve safety and reduce costs. Our team includes engineering subject matter expertise in hardware, software, and information technology as well as industry specific applications of artificial intelligence also referred to as Expert Artificial Intelligence. We also have specific industry experts on staff and as consultants in the rail industry.

Duos is currently developing industry solutions for its target markets which will address rail, trucking, aviation and other vehicle-based processes. Duos' initial offering, the Railcar Inspection Portal (RIP), provides both freight and transit railroad customers and select government agencies the ability to conduct fully automated railcar inspections of trains while they are moving at full speed. The RIP utilizes a variety of sophisticated optical, laser and speed sensors to scan each passing railcar to create a high-resolution

image-set of the top, sides and undercarriage. These images are then processed with our edge data center using artificial intelligence (AI) algorithms to identify safety and security defects on each railcar. The algorithms are developed in conjunction with industrial application experts, in this case resident Railcar Mechanical Engineers, to provide specific guidance in the analysis (“human in the loop”). Within minutes of the railcar passing through the RIP, a detailed report is sent to the customer where they are able to action identified issues. This solution has the potential to transform the railroad industry by increasing safety, improving efficiency and reducing costs. The Company has already deployed this system with several Class 1 railroads and anticipates an increased demand from transit and other railroad customers along with selected government agencies that operate and/or manage rail traffic. The Company has deployed RIPs in Canada, Mexico and the United States and anticipates expanding this solution into Europe, Asia and the Middle East in coming years.

The Company has also developed the Automated Logistics Information System (ALIS) which automates gatehouse operations where transport trucks enter and exit large logistics and intermodal facilities. This solution incorporates a similar set of sensors, data processing and artificial intelligence to streamline the customer’s logistics transactions and tracking and can also automate the security and safety inspection if called for. The Company has already deployed this system with one large North American retailer and anticipates increased demand from other large retailers, railroad intermodal operators and select government agencies that manage logistics and border crossing points. The Company is evaluating other solutions for moving vehicles including aircraft, which could provide similar benefits in terms of safety and efficiency for required inspections as part of an operations process.

We have developed two proprietary solutions that operate our software and artificial intelligence. **centraco**[®] is an Enterprise Information Management Software platform that consolidates data and events from multiple sources into a unified and distributive user interface. Customized to the end user’s Concept of Operations (CONOPS), it provides improved situational awareness and data visualization for operational objectives compared to traditional manual inspections. **truevue360**[™] is our fully integrated platform that we utilize to develop and deploy Artificial Intelligence (AI) algorithms, including Machine Learning, Computer Vision, Object Detection and Deep Neural Network-based processing for real-time applications.

These same Artificial Intelligence applications have begun to open up other opportunities for the Company to provide revenue producing solutions with potentially high market adoption.

In 2021, the Company ended support of its IT Asset Management (ITAM) solution which cataloged results for data center asset inventory and audit services. We are currently evaluating using our current operations experience within “edge data centers” (as deployed for our Railcar Inspection Portal) to drive additional revenues within other markets requiring this type of solution although no specific offering has been developed at this time.

In the last quarter of 2022, the Company elected not to renew a support contract for its Integrated Correctional Automation System (iCAS) for one customer. The Company is currently looking to sell the assets related to that business but due to the limited nature of this business, any impact is not expected to be material.

The year 2022 ushered in a new phase in the Company’s development. Although we continue to see an extension of challenges faced in 2021, we also see positive changes and opportunities for our business that will be discussed in greater detail herein. They include:

- Introducing a new “subscription” based offering for access to data and images by a much broader target market including Class 1 railroads, railcar owners and lessors, and short-line railroads.
- Owning and operating a network of RIPs with multiple subscribers outside of the Company’s traditional customer base.
- Selling customized RIPs to Class 1, short-line and other industrial companies where specialized applications or routes demand a bespoke solution.

duostech[™]

Railcar Inspection Portal (rip[®])

Federal regulations require each railcar/train to be inspected for mechanical defects prior to leaving a rail yard. Founded in 1934, the Association of American Railroads (AAR) is responsible for setting the standards for the safety and productivity of the U.S./North American freight rail industry, and by extension, has established the inspection parameters for the rail industry’s rolling stock. Also known as the “Why Made” codes, the AAR established approximately 110 inspection points under its guidelines for mechanical inspections.

Under current practice, inspections are conducted manually, a very labor intensive and inefficient process that only covers a select number of inspection points and can take several hours per train. We believe our Railcar Inspection Portal has the potential to reduce this inspection to minutes while the train is moving at speed, improving safety, reducing dwell time and optimizing maintenance.

Our system combines high-definition image and data capture technologies with our AI-based analytics applications that are typically installed on active tracks located between two rail yards. We inspect railcars traveling through our inspection portal at speeds of up to 70 mph and report mechanical anomalies detected by our system to the inbound train yard, well ahead of the train entering the yard.

Currently, three Class 1 railroads and several transit and international railroads use our rip[®] technology with one of those railroads broadly deploying the technology across its network.

The Company continues to expand its detection capabilities through the development and integration of additional sensor technologies to include laser, infrared, thermal, sound and x-ray to process AI-based analytics of inspection points. Currently the Company has a high-reliability catalog of over 35 artificial intelligence algorithms which can be integrated into the RIP to enhance mechanical anomalies detections. These detections support railroads in the active maintenance and overall safety of their railcar fleet and networks.

Markets

We believe the opportunity for our Railcar Inspection Portal business is substantial and continues to be our number one priority. We are currently engaged with the RIP solution with three of seven Class 1 railroad operators with 13 systems already deployed across the North American rail network. Because of our early leadership position, we have been able to accumulate experience and intellectual property that we believe would be time consuming and expensive for a new competitor to replicate. Furthermore, we believe we have the ability to upgrade and scale our solutions with additional technologies in the future. We believe that the current market for our technologies is substantial. At the same time, we recognize that the technology life cycle is fast and evolving. Potential competitors could move into this sector, and it is possible that some Class 1 railroads could develop their own solutions that limit our total addressable market.

In late 2022, the Company announced it will pursue a subscription platform for the RIPs. Under this new model, the Company will build, own and operate its RIP product and offer the data access for each portal to potential customers. This expansion of the RIP offering would potentially open up the addressable market to other railroads, railcar owners, and car lessors. This shift increases the pool of potential customers by lowering the entry point for the RIP and would reshape the Company’s working capital needs to invest in the construction of a RIP ahead of customer revenue inflows. The Company continues to explore this expansion on the long-term effects it may have on future cash

Another market we are pursuing as our second priority is using our Automated Logistics and Information Systems solution (ALIS™). Potential customers include commercial retail logistics and intermodal operators, Class 1 rail intermodal operators that are moving large amounts of automobiles, and U.S. Government agencies such as the Department of Defense and the Department of Homeland Security. Today, we currently have 20 production systems in use, but we believe the greenfield opportunity here to be substantial. We have identified over 900 lanes of traffic within nearly 300 facilities as potential business opportunities in the near-term.

Currently, we are focused on the North American market, but plan to expand globally in the future with interest from Europe, Asia and the Middle East.

Patents and Trademarks

The Company holds a number of patents and trademarks for our technology solutions. We protect our intellectual property rights by relying on federal, state, and common law rights, as well as contractual restrictions. We control access to our proprietary technology by entering into confidentiality and invention assignment agreements with all of our employees and contractors, and confidentiality agreements with third parties. We also actively engage in monitoring activities with respect to infringing uses of our intellectual property by third parties.

Specific Areas of Competition

One of our primary commercial goals is to develop innovative technology solutions and target potential “greenfield” market spaces in order to maximize our business footprint and give us the ability to help define the market parameters for the future.

Other companies that participate in the visual and optical (laser) based railcar inspection systems market include Wabtec (Beena Vision), KLD Labs, WID, IEM, and Camlin Rail. Some Class 1 railroads have stated that they are developing “in-house” solutions. We believe that Duos has a significant competitive advantage in that we have multiple years of deployment experience, have access to millions of images where our RIP has performed scans with AI analysis and in-house industry expertise to train our systems and make identification of common problems more automated.

Our Automated Logistics Information System (ALIS) also represents an opportunity to expand into a mature market that we believe has a significant technology gap. While most facilities, such as distribution centers, that process commercial trucks in and out have sophisticated software management applications for logistics control, they have most often not implemented an advanced gatehouse automation solution. Historically, this category was referred to as “Automated Gate Systems” or AGS. The purpose of AGS technology is to streamline entry in to and exit out of facilities. The marketplace for this was mostly seaports and intermodal transfer facilities and was relatively expensive technology to deploy.

Our Growth Strategy

Vision

The Company designs, develops, deploys and operates intelligent technology solutions for inspecting and evaluating moving objects. Its technology application focus is within the rail and intermodal markets which offers imaging-based automatic inspection and analysis for process control for industry with potential expansion into other markets.

Objectives

- Improve our operational and technical execution, customer satisfaction and implementation speed.
- Expand Rail Inspection Portal and Automated Logistics Information System with current and future customers in Rail, Logistics and U.S. Government sectors.
- Offer both CAPEX (one-time sale) and Subscription pricing models that seek to increase recurring revenue and improve profitability.
- Form strategic partnerships that improve market access and credibility.
- Improve policy, processes, and toolsets to become a viable platform for internal growth and for mergers and acquisitions.
- Thoughtfully execute mergers and acquisitions to expand offerings and/or capabilities.
- Promote a performance-based work force where employees enjoy their work and are incentivized to excel and innovate.

Organic Growth

Our organic growth strategy is to continue our focus and prioritization in the rail, logistics and intermodal market space. In this regard, the Company has made significant changes in the senior management team to include a new Chief Executive Officer, who joined the Company in September 2020 and has years of experience successfully leading start-up and turn-around companies. In addition, a key account executive from one of duos’ competitors has joined the executive team during late 2022 as the Senior Vice President of Sales & Marketing to support the continued revenue growth of the business and brings with him over 20 years of sales experience focused in the rail market. In 2021, the Company also hired a new Chief Technology Officer bringing 25 years of experience in designing and delivering value driven technologies. Our new CTO has already led the team through instrumental changes to its approach to software and artificial intelligence development. The team also saw a change in CFO in late 2022 with the new CFO bringing significant experience in growth for asset-intensive businesses which aligns with the subscription format the Company will expand into.

The new leadership team’s focus is to improve operational and technical execution which will in turn enable the commercial side of the business to expand RIP and ALIS delivery into existing and new customers. Even though supply chain issues are expected to continue through 2023, the Company’s primary customers have indicated readiness to order more equipment and services based upon the Company’s current performance and the new subscription offerings expands the universe of potential customers.

Additionally, the CEO has directed that the Company make continual engineering and software upgrades to the RIP to meet anticipated Federal Railroad Association (FRA) and Association of American Railroad (AAR) standards.

Manufacturing and Assembly

The Company designs and develops technology solutions using a combination of in-house fabrication, commercial off-the-shelf technology, and outsourced manufacturing. On-site installations are performed using a combination of in-house project managers and engineers and using third-party sub-contractors as needed. Throughout the process of design, develop, deploy and operate, the Company maintains responsibility for all aspects. Our internal manufacturing operations consist primarily of materials procurement, assembly, testing and quality control by our engineers. If not manufactured internally, we use third-party manufacturing partners to produce our hardware related components and hardware products and we most often complete final assembly, testing and quality control processes for these components and products. Our manufacturing processes are based on standardization of components across product types, centralization of assembly and distribution centers, and a “build-to-order” methodology in which products generally are built only after customers have placed firm orders. For most of our hardware products, we have existing alternate sources of supply.

For 2023 and possibly beyond, we expect to face significant challenges with macro-economic impacts, specifically inflation and supply chain disruption. Although these started to be identified in late 2021, we believe they continue to manifest themselves in ways that could challenge our business growth in the future. Specifically, the ability to source key components and certain implementation services will dictate just how quickly the Company can meet desired installation deadlines. In the industries in which we operate, the time from concept to contract can be substantial. Although we are now adapting to these challenges, previous bids that have been submitted could be challenging to execute within the financial framework and execution times originally envisaged. We continue to have dialogue with our customers regarding potential price increases and implementation delays, but we may suffer some economic impacts as a result of this. Revenue recognition could be delayed as a result of these factors and profitability could be impacted due to higher costs for materials and other services. The Company will continue to monitor the situation and update shareholders as the situation unfolds.

Research and Development

The Company’s R&D and software development teams design and develop all systems and software applications with a combination of full-time in-house software engineers and outside contractors. Internal development allows us to maintain technical control over the design and development of our products. Rapid technological advances in hardware and software development, evolving standards in computer hardware and software technology, and changing customer requirements characterize the markets in which we compete. We plan to continue to dedicate significant resources to research and development efforts, including software development, to maintain and improve our current product and services offerings.

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Government Regulations

The Company has worked with various agencies of the federal government for more than 10 years including the Department of Homeland Security (“DHS”). When our solutions have been deployed into these agencies, they meet specific requirements for certification, safety and security that are stipulated in requirements and contract documents. The Company is currently competing for other government related work and strictly follows the rules and regulations outlined in the Federal Acquisition Regulations.

The Company’s primary customers are all governed by regulations related to the safe and effective transportation of goods, primarily by rail, but in future scenarios by air, road and sea. While changes in the regulatory environment could impact the Company in future years, we believe any changes will be overall positive for the Company. We continuously review potential changes in the regulatory environment and maintain contact with key personnel at certain agencies including the Federal Railroad Administration (FRA), the Transportation Safety Agency (TSA) as well as the DHS previously mentioned. We expect to develop similar relationships with governmental agencies in target markets both in the US and internationally. At this time, we believe our offerings are complementary to the current and evolving standards and that we will adapt to any new regulations as they are promulgated.

Employees

We have a current staff of 75 employees, of which 67 are full-time, the majority of which work in the Jacksonville area, none of which are subject to a collective bargaining agreement. We have not experienced any work stoppages and we consider our relationship with our employees to be good.

Recent Developments

As previously reported, on May 16, 2023 the Company held its 2023 annual meeting of stockholders. Certain matters were approved at the meeting including election of Board members, the issuance of shares of common stock upon conversion of shares of Series D Preferred Stock, approval of an Employee Stock Purchase Plan (ESPP), and ratification of the auditors.

Our Corporate History

Information Systems Associates, Inc. (“ISA”) was incorporated in Florida on May 31, 1994. Our original business operations consisted of consulting services for asset management of large corporate data centers and the development and licensing of information technology (“IT”) asset management software. In late 2014, ISA entered negotiations with Duos Technologies, Inc. (“duostech™”) for the purposes of executing a merger between the two organizations (also known as a “reverse triangular merger”). Incorporated under the laws of Florida on November 30, 1990, duostech™ operated in various industry segments, specializing in the design, development and deployment of proprietary technology applications and turn-key engineered systems. This transaction was completed on April 1, 2015, whereby duostech™ became a wholly owned subsidiary of ISA. After the merger was completed, ISA changed its corporate name to Duos Technologies Group, Inc. The Company, based in Jacksonville, Florida, oversees its wholly owned subsidiary, duostech™ and employs approximately 75 people and is a technology company which designs, develops, deploys and operates intelligent technology solutions with a focus on software applications and artificial intelligence (“AI”). The Company has a strong portfolio of intellectual property. The Company’s headquarters are located at 7660 Centurion Parkway, Suite 100, Jacksonville, Florida 32256 and main telephone number is (904) 296-2807.

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RISK FACTORS

Investment in any securities offered pursuant to this prospectus and the applicable prospectus supplement involves risks. You should carefully consider the risk factors incorporated by reference from our most recent Annual Report on Form 10-K filed with the SEC on March 31, 2023 and our Quarterly Report on Form 10-Q filed with the SEC on May 15, 2023, and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K we file after the date of this prospectus, and all other information contained or incorporated by reference into this prospectus, as updated by our subsequent filings under the Exchange Act, and the risk factors and other information contained in the applicable prospectus supplement before acquiring any of such securities. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

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This prospectus contains forward-looking statements that involve risks and uncertainties, principally in the sections entitled “Risk Factors.” All statements other than statements of historical fact contained in this prospectus, including statements regarding future events, our future financial performance, business strategy and plans and objectives of management for future operations, are forward-looking statements. We have attempted to identify forward-looking statements by terminology including “anticipates,” “believes,” “can,” “continue,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “potential,” “predicts,” “should,” or “will” or the negative of these terms or other comparable terminology. Although we do not make forward-looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks outlined under “Risk Factors” or elsewhere in this prospectus.

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by which, that performance or those results will be achieved. Forward-looking statements are based on information available at the time they are made and/or management’s good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from what is expressed in or suggested by the forward-looking statements.

Forward-looking statements speak only as of the date they are made. You should not put undue reliance on any forward-looking statements. We assume no obligation to update forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information, except to the extent required by applicable securities laws. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of the securities as set forth in the applicable prospectus supplement.

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DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock is not complete and may not contain all the information you should consider before investing in our capital stock. This description is summarized from, and qualified in its entirety by reference to, our Certificate of Incorporation and Bylaws, which have been publicly filed with the SEC. See “Where You Can Find More Information; Incorporation by Reference.”

Our authorized capital stock consists of 500,000,000 shares of common stock, par value of \$0.001 per share, and 10,000,000 shares of preferred stock, par value of \$0.001 per share. As of May 31, 2023, there were 7,169,339 shares of our common stock issued and 7,168,015 shares outstanding held by 292 holders of record. We currently have (i) 500,000 shares of Series A Preferred Stock authorized of which 0 shares of Series A Preferred Stock are issued and outstanding; (ii) 15,000 shares of Series B Preferred Stock authorized of which 0 shares of Series B Preferred Stock are issued and outstanding; (iii) 5,000 shares of Series C Preferred Stock authorized of which 0 shares of Series C Preferred Stock are issued and outstanding; (iv) 4,000 shares of Series D Preferred Stock authorized of which 1,299 shares of Series D Preferred Stock are issued and outstanding; and (v) 9,446,000 shares of undesignated “blank check” preferred stock.

Common Stock

Each share of our common stock entitles its holder to one vote in the election of each director and on all other matters voted on generally by our stockholders. No share of our common stock affords any cumulative voting rights. This means that the holders of a majority of the voting power of the shares voting for the election of directors can elect all directors to be elected if they choose to do so.

Holders of our common stock will be entitled to dividends in such amounts and at such times as our Board of Directors in its discretion may declare out of funds legally available for the payment of dividends. We currently do not anticipate paying any cash dividends on the common stock in the foreseeable future. Any future dividends will be paid at the discretion of our Board of Directors after taking into account various factors, including:

- general business conditions;
- industry practice;
- our financial condition and performance;
- our future prospects;
- our cash needs and capital investment plans;
- our obligations to holders of any preferred stock we may issue;
- income tax consequences; and
- the restrictions Florida and other applicable laws and our credit arrangements may impose, from time to time.

If we liquidate or dissolve our business, the holders of our common stock will share ratably in all our assets that are available for distribution to our stockholders after our creditors are paid in full and the holders of all series of our outstanding preferred stock, if any, receive their liquidation preferences in full.

Our common stock has no preemptive rights and is not convertible or redeemable or entitled to the benefits of any sinking or repurchase fund.

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Preferred Stock

The Company has 10,000,000 authorized shares of preferred stock par value \$0.001 per share, which have five series. As of June 9, 2023, the Series A Preferred Stock has 0 shares issued and outstanding, the Series B Preferred Stock has 0 shares issued and outstanding, the Series C Preferred Stock has 0 shares issued and outstanding, the Series D Preferred Stock has 1,299 shares issued and outstanding, and the Series E Preferred Stock has 4,000 shares issued and outstanding.

Our Board has the authority, within the limitations and restrictions in our certificate of incorporation, to issue shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series or the designation of any series, without further vote or action by the stockholders. The issuance of shares of preferred stock may have the effect of delaying, deferring or preventing a change in our control without further action by the stockholders. The issuance of shares of preferred stock with voting and conversion rights may adversely affect the voting power of the holders of our common stock. In some circumstances, this issuance could have the effect of decreasing the market price of our common stock.

Undesignated preferred stock may enable our Board to render more difficult or to discourage an attempt to obtain control of the Company by means of a tender offer, proxy contest, merger or otherwise, and thereby to protect the continuity of our management. The issuance of shares of preferred stock may adversely affect the rights of our common stockholders. For example, any shares of preferred stock issued may rank senior to the common stock as to dividend rights, liquidation preference or both, may have full or limited voting rights and may be convertible into shares of common stock. As a result, the issuance of shares of preferred stock, or the issuance of rights to purchase shares of preferred stock, may discourage an unsolicited acquisition proposal or bids for our common stock or may otherwise adversely affect the market price of our common stock or any existing preferred stock.

Series A Preferred Stock

Each share of the Series A Preferred Stock is convertible into 1.59 shares of common stock, and is senior to any other class or series of capital stock of the Company. Holders of Series A Preferred Stock shall vote together with the holders of common stock on an as-converted basis on all matters on which holders of the common stock are entitled to vote.

There are currently 0 shares of Series A Preferred Stock outstanding.

Series B Preferred Stock

Each share of the Series B Preferred Stock is convertible into 143 shares of common stock. Holders of Series B Preferred Stock shall vote together with the holders of common stock on an as-converted basis (subject to the applicable beneficial ownership limitation) on all matters on which holders of the common stock are entitled to vote.

There are currently 0 shares of Series B Preferred Stock outstanding.

Series C Preferred Stock

Each share of the Series C Preferred Stock is convertible into 182 shares of common stock. Holders of Series C Preferred Stock shall have 172 votes (subject to the applicable beneficial ownership limitation) for each share of Series C Preferred Stock and shall vote together with the holders of common stock on all matters on which holders of the common stock are entitled to vote.

There are currently 0 shares of Series C Preferred Stock outstanding.

Series D Preferred Stock

Each share of the Series D Preferred Stock is convertible into 333 shares of common stock. Holders of Series D Preferred Stock shall have 333 votes (subject to the applicable beneficial ownership limitation) for each share of Series D Preferred Stock, and shall vote together with the holders of common stock on all matters on which holders of the common stock are entitled to vote.

There are currently 1,299 shares of Series D Preferred Stock outstanding.

Series E Preferred Stock

Each share of the Series E Preferred Stock is convertible into 333 shares of common stock. Holders of Series E Preferred Stock shall have 333 votes (subject to the applicable beneficial ownership limitation) for each share of Series E Preferred Stock, and shall vote together with the holders of common stock on all matters on which holders of the common stock are entitled to vote.

There are currently 4,000 shares of Series E Preferred Stock outstanding.

Options and Warrants

As of June 9, 2023, there are 924,658 outstanding options to purchase shares of our common stock. The weighted average exercise price of these options is \$5.73, the average term when issued was five years and the average term remaining is three years.

As of June 9, 2023, there are warrants outstanding to purchase 80,091 shares of our common stock of which none are subject to full ratchet price protection on the exercise price. The warrants are exercisable for a term of five years with a weighted average remaining term of one year and a weighted average exercise price of \$8.53.

Anti-Takeover Provisions

Florida Anti-Takeover Law and Certain Charter and Bylaw Provisions

Certain provisions of Florida law and our Charter and bylaws could make it more difficult to acquire us by means of a tender offer, a proxy contest or otherwise, or to remove incumbent officers and directors. These provisions, summarized below, may discourage certain types of takeover practices and takeover bids, and encourage persons seeking to acquire control of our company to first negotiate with us. We believe that the potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweighs the disadvantages of discouraging such proposals because, among other things, negotiation of such proposals could result in an improvement of their terms.

Florida Law

As a Florida corporation, we are subject to certain anti-takeover provisions that apply to public corporations under Florida law.

Pursuant to Section 607.0901 of the Florida Business Corporation Act, or the FBCA, a publicly held Florida corporation may not engage in a broad range of business combinations or other extraordinary corporate transactions with an interested shareholder without the approval of the holders of two-thirds of the voting shares of the corporation (excluding shares held by the interested shareholder), unless:

The transaction is approved by a majority of disinterested directors before the shareholder becomes an interested shareholder;

The interested shareholder has owned at least 80% of the corporation's outstanding voting shares for at least five years preceding the announcement date of any such business combination;

The interested shareholder is the beneficial owner of at least 90% of the outstanding voting shares of the corporation, exclusive of shares acquired directly from the corporation in a transaction not approved by a majority of the disinterested directors; or

The consideration paid to the holders of the corporation's voting stock is at least equal to certain fair price criteria.

An interested shareholder is defined as a person who, together with affiliates and associates, beneficially owns more than 10% of a corporation's outstanding voting shares. We have not made an election in our amended Articles of Incorporation to opt out of Section 607.0901.

In addition, we are subject to Section 607.0902 of the FBCA which prohibits the voting of shares in a publicly held Florida corporation that are acquired in a control share acquisition unless (i) our Board of Directors approved such acquisition prior to its consummation or (ii) after such acquisition, in lieu of prior approval by our Board of Directors, the holders of a majority of the corporation's voting shares, exclusive of shares owned by officers of the corporation, employee directors or the acquiring party, approve the granting of voting rights as to the shares acquired in the control share acquisition. A control share acquisition is defined as an acquisition that immediately thereafter entitles the acquiring party to 20% or more of the total voting power in an election of directors.

The NASDAQ Capital Market Listing

Our common stock is listed on the NASDAQ Capital Market under the symbol "DUOT".

Transfer Agent

The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company located at 1 State Street, 30th Floor, New York, NY 10004.

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DESCRIPTION OF DEBT SECURITIES

General

The debt securities that we may offer by this prospectus consist of notes, debentures, or other evidence of indebtedness. The debt securities may constitute either senior or subordinated debt securities, and in either case may be either secured or unsecured. Any debt securities that we offer, and sell will be our direct obligations. Debt securities may be issued in one or more series. All debt securities of any one series need not be issued at the same time, and unless otherwise provided, a series of debt securities may be reopened, with the required consent of the holders of outstanding debt securities, for issuance of additional debt securities of that series or to establish additional terms of that series of debt securities (with such additional terms applicable only to unissued or additional debt securities of that series). The form of indenture has been filed as an exhibit to the registration statement of which this prospectus is a part and is subject to any amendments or supplements that we may enter into with the trustee(s), however, we may issue debt securities not subject to the indenture provided such terms of debt securities are not otherwise required to be set forth in the indenture. The material terms of the indenture are summarized below and we refer you to the indenture for a detailed description of these material terms. Additional or different provisions that are applicable to a particular series of debt securities will, if material, be described in a prospectus supplement relating to the offering of debt securities of that series. These provisions may include, among other things and to the extent applicable, the following:

- the title of the debt securities, including, as applicable, whether the debt securities will be issued as senior debt securities, senior subordinated debt securities or subordinated debt securities, and any subordination provisions particular to the series of debt securities;
- any limit on the aggregate principal amount of the debt securities;
- whether the debt securities will be secured or unsecured;
- if other than 100% of the aggregate principal amount, the percentage of the aggregate principal amount at which we will sell the debt securities, such as an original issuance discount;
- the date or dates, whether fixed or extendable, on which the principal of the debt securities will be payable;
- the rate or rates, which may be fixed or variable, at which the debt securities will bear interest, if any, the date or dates from which any such interest will accrue, the interest payment dates on which we will pay any such interest, the basis upon which interest will be calculated if other than that of a 360-day year consisting of twelve 30-day months, and, in the case of registered securities, the record dates for the determination of holders to whom interest is payable;
- the place or places where the principal of and any premium or interest on the debt securities will be payable and where the debt securities may be surrendered for conversion or exchange;
- whether we may, at our option, redeem the debt securities, and if so, the price or prices at which, the period or periods within which, and the terms and conditions upon which, we may redeem the debt securities, in whole or in part, pursuant to any sinking fund or otherwise;
- if other than 100% of the aggregate principal amount thereof, the portion of the principal amount of the debt securities which will be payable upon declaration of acceleration of the maturity date thereof or provable in bankruptcy, or, if applicable, which is convertible or exchangeable;
- any obligation we may have to redeem, purchase or repay the debt securities pursuant to any sinking fund or analogous provisions or at the option of a holder of debt securities, and the price or prices at which, the currency in which and the period or periods within which, and the terms and conditions upon which, the debt securities will be redeemed, purchased or repaid, in whole or in part, pursuant to any such obligation, and any provision for the remarketing of the debt securities;
- the issuance of debt securities as registered securities or unregistered securities or both, and the rights of the holders of the debt securities to exchange unregistered securities for registered securities, or vice versa, and the circumstances under which any such exchanges, if permitted, may be made;
- the denominations, which may be in United States Dollars or in any foreign currency, in which the debt securities will be issued, if other than denominations of \$1,000 and any integral multiple thereof;
- whether the debt securities will be issued in the form of certificated debt securities, and if so, the form of the debt securities (or forms thereof if unregistered and registered securities are issuable in that series), including the legends required by law or as we deem necessary or appropriate, the form of any coupons or temporary global security which may be issued and the forms of any other certificates which may be required under the indenture or which we may require in connection with the offering, sale, delivery or exchange of the debt securities;

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- if other than United States Dollars, the currency or currencies in which payments of principal, interest and other amounts payable with respect to the debt securities will be denominated, payable, redeemable or repurchasable, as the case may be;
 - whether the debt securities may be issuable in tranches;
 - the obligations, if any, we may have to permit the conversion or exchange of the debt securities into common stock, preferred stock or other capital stock or property, or a combination thereof, and the terms and conditions upon which such conversion or exchange will be effected (including conversion price or exchange ratio), and any limitations on the ownership or transferability of the securities or property into which the debt securities may be converted or exchanged;

- if other than the trustee under the indenture, any trustees, authenticating or paying agents, transfer agents or registrars or any other agents with respect to the debt securities;
- any deletions from, modifications of or additions to the events of default with respect to the debt securities or the right of the Trustee or the holders of the debt securities in connection with events of default;
- any deletions from, modifications of or additions to the covenants with respect to the debt securities;
- if the amount of payments of principal of, and make-whole amount, if any, and interest on the debt securities may be determined with reference to an index, the manner in which such amount will be determined;
- whether the debt securities will be issued in whole or in part in the global form of one or more debt securities and, if so, the depository for such debt securities, the circumstances under which any such debt security may be exchanged for debt securities registered in the name of, and under which any transfer of debt securities may be registered in the name of, any person other than such depository or its nominee, and any other provisions regarding such debt securities;
- whether, under what circumstances and the currency in which, we will pay additional amounts on the debt securities to any holder of the debt securities who is not a United States person in respect of any tax, assessment or governmental charge and, if so, whether we will have the option to redeem such debt securities rather than pay such additional amounts, and the terms of any such option;
- whether the debt securities will be secured by any collateral and, if so, a general description of the collateral and the terms of any related security, pledge or other agreements;
- the persons to whom any interest on the debt securities will be payable, if other than the registered holders thereof on the regular record date therefor; and
- any other material terms or conditions upon which the debt securities will be issued.

Unless otherwise indicated in the applicable prospectus supplement, we will issue debt securities in fully registered form without coupons and in denominations of \$1,000 and in integral multiples of \$1,000, and interest will be computed on the basis of a 360-day year of twelve 30-day months. If any interest payment date or the maturity date falls on a day that is not a business day, then the payment will be made on the next business day without additional interest and with the same effect as if it were made on the originally scheduled date. "Business day" means any calendar day that is not a Saturday, Sunday or legal holiday in New York, New York, and on which the trustee and commercial banks are open for business in New York, New York.

Unless we inform you otherwise in a prospectus supplement, each series of our senior debt securities will rank equally in right of payment with all of our other unsubordinated debt. The subordinated debt securities will rank junior in right of payment and be subordinate to all of our unsubordinated debt.

Unless otherwise indicated in the applicable prospectus supplement, the trustee will act as paying agent and registrar for the debt securities under the indenture. We may act as paying agent under the indenture.

The prospectus supplement will contain a description of United States federal income tax consequences relating to the debt securities, to the extent applicable.

Covenants

The applicable prospectus supplement will describe any covenants, such as restrictive covenants restricting us or our subsidiaries, if any, from incurring, issuing, assuming or guarantying any indebtedness or restricting us or our subsidiaries, if any, from paying dividends or acquiring any of our or its capital stock.

Consolidation, Merger and Transfer of Assets

The indenture permits a consolidation or merger between us and another entity and/or the sale, conveyance or lease by us of all or substantially all of our property and assets, provided that:

- the resulting or acquiring entity, if other than us, is organized and existing under the laws of a United States jurisdiction and assumes all of our responsibilities and liabilities under the indenture, including the payment of all amounts due on the debt securities and performance of the covenants in the indenture;
- immediately after the transaction, and giving effect to the transaction, no event of default under the indenture exists; and
- we have delivered to the trustee an officers' certificate stating that the transaction and, if a supplemental indenture is required in connection with the transaction, the supplemental indenture comply with the indenture and that all conditions precedent to the transaction contained in the indenture have been satisfied.

If we consolidate or merge with or into any other entity, or sell or lease all or substantially all of our assets in compliance with the terms and conditions of the indenture, the resulting or acquiring entity will be substituted for us in the indenture and the debt securities with the same effect as if it had been an original party to the indenture and the debt securities. As a result, such successor entity may exercise our rights and powers under the indenture and the debt securities, in our name and, except in the case of a lease, we will be released from all our liabilities and obligations under the indenture and under the debt securities.

Notwithstanding the foregoing, we may transfer all of our property and assets to another entity if, immediately after giving effect to the transfer, such entity is our wholly owned subsidiary. The term "wholly owned subsidiary" means any subsidiary in which we and/or our other wholly owned subsidiaries, if any, own all of the outstanding capital stock.

Modification and Waiver

Under the indenture, some of our rights and obligations and some of the rights of the holders of the debt securities may be modified or amended with the consent of the holders of not less than a majority in aggregate principal amount of the outstanding debt securities affected by the modification or amendment. However, the following modifications and amendments will not be effective against any holder without its consent:

- a change in the stated maturity date of any payment of principal or interest;
- a reduction in the principal amount of or interest on any debt securities;
- an alteration or impairment of any right to convert at the rate or upon the terms provided in the indenture;
- a change in the currency in which any payment on the debt securities is payable;
- an impairment of a holder's right to sue us for the enforcement of payments due on the debt securities; or
- a reduction in the percentage of outstanding debt securities required to consent to a modification or amendment of the indenture or required to consent to a waiver of compliance with certain provisions of the indenture or certain defaults under the indenture.

Under the indenture, the holders of not less than a majority in aggregate principal amount of the outstanding debt securities may, on behalf of all holders of the debt securities:

- waive compliance by us with certain restrictive provisions of the indenture; and
- waive any past default under the indenture in accordance with the applicable provisions of the indenture, except a default in the payment of the principal of or interest on any series of debt securities.

Events of Default

Unless we indicate otherwise in the applicable prospectus supplement, "event of default" under the indenture will mean, with respect to any series of debt securities, any of the following:

- failure to pay interest on any debt security for 30 days after the payment is due;
- failure to pay the principal of any debt security when due, either at maturity, upon redemption, by declaration or otherwise;
- failure on our part to observe or perform any other covenant or agreement in the indenture that applies to the debt securities for 90 days after we have received written notice of the failure to perform in the manner specified in the indenture; and
- certain events of bankruptcy, insolvency or reorganization.

Remedies Upon an Event of Default

If an event of default occurs and continues, the trustee or the holders of not less than 25% in aggregate principal amount of the outstanding debt securities of such series may declare the entire principal of all the debt securities to be due and payable immediately, except that, if the event of default is caused by certain events in bankruptcy, insolvency or reorganization, the entire principal of all of the debt securities of such series will become due and payable immediately without any act on the part of the trustee or holders of the debt securities. If such a declaration occurs, the holders of a majority of the aggregate principal amount of the outstanding debt securities of such series can, subject to conditions, rescind the declaration.

The indenture requires us to furnish to the trustee not less often than annually, a certificate from our principal executive officer, principal financial officer or principal accounting officer, as the case may be, as to such officer's knowledge of our compliance with all conditions and covenants under the indenture. The trustee may withhold notice to the holders of debt securities of any default, except defaults in the payment of principal of or interest on any debt securities if the trustee in good faith determines that the withholding of notice is in the best interests of the holders. For purposes of this paragraph, "default" means any event which is, or after notice or lapse of time or both would become, an event of default under the indenture.

The trustee is not obligated to exercise any of its rights or powers under the indenture at the request, order or direction of any holders of debt securities, unless the holders offer the trustee satisfactory security or indemnity. If satisfactory security or indemnity is provided, then, subject to other rights of the trustee, the holders of a majority in aggregate principal amount of the outstanding debt securities may direct the time, method and place of:

- conducting any proceeding for any remedy available to the trustee; or
- exercising any trust or power conferred upon the trustee.

The holder of a debt security will have the right to begin any proceeding with respect to the indenture or for any remedy only if:

- the holder has previously given the trustee written notice of a continuing event of default;
- the holders of not less than a majority in aggregate principal amount of the outstanding debt securities have made a written request of, and offered reasonable indemnity to, the trustee to begin such proceeding;
- the trustee has not started such proceeding within 60 days after receiving the request; and
- no direction inconsistent with such written request has been given to the trustee under the indenture.

However, the holder of any debt security will have an absolute right to receive payment of principal of and interest on the debt security when due and to institute suit to enforce this payment.

Satisfaction and Discharge; Defeasance

Satisfaction and Discharge of Indenture. Unless otherwise indicated in the applicable prospectus supplement, if at any time,

- we have paid the principal of and interest on all the debt securities of any series, except for debt securities which have been destroyed, lost or stolen and which have been replaced or paid in accordance with the indenture, as and when the same shall have become due and payable, or
- we have delivered to the trustee for cancellation all debt securities of any series theretofore authenticated, except for debt securities of such series which have been destroyed, lost or stolen and which have been replaced or paid as provided in the indenture, or
- all the debt securities of such series not theretofore delivered to the trustee for cancellation have become due and payable, or are by their terms to become due and payable within one year or are to be called for redemption within one year, and we have deposited with the trustee, in trust, sufficient money or government obligations, or a combination thereof, to pay the principal, any interest and any other sums due on the debt securities, on the dates the payments are due or become due under the indenture and the terms of the debt securities,

then the indenture shall cease to be of further effect with respect to the debt securities of such series, except for:

- rights of registration of transfer and exchange, and our right of optional redemption;
- substitution of mutilated, defaced, destroyed, lost or stolen debt securities;
- rights of holders to receive payments of principal thereof and interest thereon upon the original stated due dates therefor (but not upon acceleration) and remaining rights of the holders to receive mandatory sinking fund payments, if any;
- the rights, obligations and immunities of the trustee under the indenture; and
- the rights of the holders of such series of debt securities as beneficiaries thereof with respect to the property so deposited with the trustee payable to all or any of them.

Defeasance and Covenant Defeasance. Unless otherwise indicated in the applicable prospectus supplement, we may elect with respect to any debt securities of any series either:

- to defease and be discharged from all of our obligations with respect to such debt securities ("defeasance"), with certain exceptions described below; or
- to be released from our obligations with respect to such debt securities under such covenants as may be specified in the applicable prospectus supplement, and any omission to comply with those obligations will not constitute a default or an event of default with respect to such debt securities ("covenant defeasance").

We must comply with the following conditions before the defeasance or covenant defeasance can be effected:

- we must irrevocably deposit with the indenture trustee or other qualifying trustee, under the terms of an irrevocable trust agreement in form and substance satisfactory to the trustee, trust funds in trust solely for the benefit of the holders of such debt securities, sufficient money or government obligations, or a combination thereof, to pay the principal, any interest and any other sums on the due dates for those payments; and

- we must deliver to the trustee an opinion of counsel to the effect that the holders of such debt securities will not recognize income, gain or loss for federal income tax purposes as a result of defeasance or covenant defeasance, as the case may be, to be effected with respect to such debt securities and will be subject to federal income tax on the same amount, in the same manner and at the same times as would be the case if such defeasance or covenant defeasance, as the case may be, had not occurred.

In connection with defeasance, any irrevocable trust agreement contemplated by the indenture must include, among other things, provision for:

- payment of the principal of and interest on such debt securities, if any, appertaining thereto when due (by redemption, sinking fund payments or otherwise),
- the payment of the expenses of the trustee incurred or to be incurred in connection with carrying out such trust provisions,
- rights of registration, transfer, substitution and exchange of such debt securities in accordance with the terms stated in the indenture, and
- continuation of the rights, obligations and immunities of the trustee as against the holders of such debt securities as stated in the indenture.

The accompanying prospectus supplement may further describe any provisions permitting or restricting defeasance or covenant defeasance with respect to the debt securities of a particular series.

Global Securities

Unless otherwise indicated in the applicable prospectus supplement, each debt security offered by this prospectus will be issued in the form of one or more global debt securities representing all or part of that series of debt securities. This means that we will not issue certificates for that series of debt securities to the holders. Instead, a global debt security representing that series will be deposited with, or on behalf of, a securities depository and registered in the name of the depository or a nominee of the depository. Any such depository must be a clearing agency registered under the Exchange Act. We will describe the specific terms of the depository arrangement with respect to a series of debt securities to be represented by a global security in the applicable prospectus supplement.

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Notices

We will give notices to holders of the debt securities by mail at the addresses listed in the security register. In the case of notice in respect of unregistered securities or coupon securities, we may give notice by publication in a newspaper of general circulation in New York, New York.

Governing Law

The particular terms of a series of debt securities will be described in a prospectus supplement relating to such series of debt securities. Any indentures will be subject to and governed by the Trust Indenture Act of 1939, as amended, and may be supplemented or amended from time to time following their execution. Unless otherwise stated in the applicable prospectus supplement, we will not be limited in the amount of debt securities that we may issue, and neither the senior debt securities nor the subordinated debt securities will be secured by any of our property or assets. Thus, by owning debt securities, you are one of our unsecured creditors.

Regarding the Trustee

From time to time, we may maintain deposit accounts and conduct other banking transactions with the trustee to be appointed under the indenture or its affiliates in the ordinary course of business.

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DESCRIPTION OF WARRANTS

We may offer to sell warrants from time to time. If we do so, we will describe the specific terms of the warrants in a prospectus supplement. In particular, we may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may also issue warrants independently or together with other securities and the warrants may be attached to or separate from those securities.

We will evidence each series of warrants by warrant certificates that we will issue under a separate agreement. We will enter into the warrant agreement with a warrant agent. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreement and warrants may be modified;
- certain United States federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific material terms, preferences, rights or limitations of or restrictions on the warrants.

Holders may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with other requested information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If a holder exercises fewer than all of the warrants represented by the warrant certificate, then we will issue a new warrant certificate for the remaining amount of warrants.

Holder will not have any of the rights of the holders of the securities purchasable upon the exercise of warrants until you exercise them. Accordingly, holder will not be entitled to, among other things, vote or receive dividend payments or similar distributions on the securities you can purchase upon exercise of the warrants.

The information provided above is only a summary of the terms under which we may offer warrants for sale. Accordingly, investors must carefully review the applicable warrant agreement for more information about the specific terms and conditions of these warrants before investing in us. In addition, please carefully review the information provided in the applicable prospectus supplement, which contains additional information that is important for you to consider in evaluating an investment in our securities.

DESCRIPTION OF RIGHTS

We may issue rights to our stockholders to purchase shares of our common stock or preferred stock described in this prospectus. We may offer rights separately or together with one or more additional rights, preferred stock, common stock, warrants or any combination of those securities in the form of units, as described in the applicable prospectus supplement. Each series of rights will be issued under a separate rights agreement to be entered into between us and a bank or trust company, as rights agent. The rights agent for any rights we offer will be set forth in the applicable prospectus supplement. The rights agent will act solely as our agent in connection with the certificates relating to the rights of the series of certificates and will not assume any obligation or relationship of agency or trust for or with any holders of rights certificates or beneficial owners of rights. The following description sets forth certain general terms and provisions of the rights to which any prospectus supplement may relate. The particular terms of the rights to which any prospectus supplement may relate and the extent, if any, to which the general provisions may apply to the rights so offered will be described in the applicable prospectus supplement. To the extent that any particular terms of the rights, rights agreement or rights certificates described in a prospectus supplement differ from any of the terms described below, then the terms described below will be deemed to have been superseded by that prospectus supplement. We encourage you to read the applicable rights agreement and rights certificate for additional information before you decide whether to purchase any of our rights.

The prospectus supplement relating to any rights that we offer will include specific terms relating to the offering, including, among other matters:

- the date of determining the stockholders entitled to the rights distribution;
- the aggregate number of shares of common stock, preferred stock or other securities purchasable upon exercise of the rights;
- the exercise price;
- the aggregate number of rights issued;
- whether the rights are transferrable and the date, if any, on and after which the rights may be separately transferred;
- the date on which the right to exercise the rights will commence, and the date on which the right to exercise the rights will expire;
- the method by which holders of rights will be entitled to exercise;
- the conditions to the completion of the offering;
- the withdrawal, termination and cancellation rights;
- whether there are any backstop or standby purchaser or purchasers and the terms of their commitment;
- whether stockholders are entitled to any oversubscription right;
- any U.S. federal income tax considerations; and
- any other terms of the rights, including terms, procedures and limitations relating to the distribution, exchange and exercise of the rights.

If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby arrangements, as described in the applicable prospectus supplement. In connection with any rights offering, we may enter into a standby underwriting or other arrangement with one or more underwriters or other persons pursuant to which such underwriters or other persons would purchase any offered securities remaining unsubscribed for after such rights offering.

DESCRIPTION OF UNITS

We may issue units consisting of any combination of the other types of securities offered under this prospectus in one or more series. We may evidence each series of units by unit certificates that we will issue under a separate agreement. We may enter into unit agreements with a unit agent. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units.

The following description, together with the additional information included in any applicable prospectus supplement, summarizes the general features of the units that we may offer under this prospectus. You should read any prospectus supplement and any free writing prospectus that we may authorize to be provided to you related to the series of units being offered, as well as the complete unit agreements that contain the terms of the units. Specific unit agreements will contain additional important terms and provisions and we will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from another report that we file with the SEC, the form of each unit agreement relating to units offered under this prospectus.

If we offer any units, certain terms of that series of units will be described in the applicable prospectus supplement, including, without limitation, the following, as applicable:

- the title of the series of units;
- identification and description of the separate constituent securities comprising the units;
- the price or prices at which the units will be issued;
- the date, if any, on and after which the constituent securities comprising the units will be separately transferable;
- a discussion of certain United States federal income tax considerations applicable to the units; and
- any other terms of the units and their constituent securities.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods or through underwriters or dealers, through agents and/or directly to one or more purchasers. The securities may be distributed from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Each time that we sell securities covered by this prospectus, we will provide a prospectus supplement or supplements that will describe the method of distribution and set forth the terms and conditions of the offering of such securities, including the offering price of the securities and the proceeds to us, if applicable.

Offers to purchase the securities being offered by this prospectus may be solicited directly. Agents may also be designated to solicit offers to purchase the securities from time to time. Any agent involved in the offer or sale of our securities will be identified in a prospectus supplement.

If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If an underwriter is utilized in the sale of the securities being offered by this prospectus, an underwriting agreement will be executed with the underwriter at the time of sale and the name of any underwriter will be provided in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for which they may act as agent. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase securities as a principal, and may then resell the securities at varying prices to be determined by the dealer.

Any compensation paid to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers will be provided in the applicable prospectus supplement. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof and to reimburse those persons for certain expenses.

Any common stock will be listed on the Nasdaq Capital Market, but any other securities may or may not be listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act.

In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

We do not make any representation or prediction as to the direction or magnitude of any effect that the transactions described above might have on the price of the securities. In addition, we do not make any representation that underwriters will engage in such transactions or that such transactions, once commenced, will not be discontinued without notice.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

To comply with applicable state securities laws, the securities offered by this prospectus will be sold, if necessary, in such jurisdictions only through registered or licensed brokers or dealers. In addition, securities may not be sold in some states unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

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LEGAL MATTERS

Shutts & Bowen LLP will pass upon certain legal matters relating to the issuance and sale of the securities offered hereby on behalf of Duos Technologies Group, Inc. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

Our consolidated balance sheets as of December 31, 2022 and 2021, and the related consolidated statements of operations, changes in stockholders' equity, and cash flows for each of those two years have been audited by Salberg & Company, P.A., an independent registered public accounting firm, as set forth in its report incorporated by reference and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following is an estimate of the expenses (all of which are to be paid by the registrant) that we may incur in connection with the securities being registered hereby.

SEC registration fee	\$	5,510	
FINRA filing fee			*
Printing expenses			*
Legal fees and expenses			*
Accounting fees and expenses			*
Blue Sky, qualification fees and expenses			*
Transfer agent fees and expenses			*
Trustee fees and expenses			*
Warrant agent fees and expenses			*
Miscellaneous			*
Total	\$		*

* These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers

Florida law permits, under certain circumstances, the indemnification of any person with respect to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, to which such person was or is a party or is threatened to be made a party, by reason of his or her being an officer, director, employee or agent of the corporation or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against liability incurred in connection with such proceeding, including appeals thereof; provided, however, that the officer, director, employee or agent acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The termination of any such third-party action by judgment, order, settlement, or conviction or upon a plea of nolo contendere or its equivalent does not, of itself, create a presumption that the person (i) did not act in good faith and in a manner which he or she reasonably believed to be in, or not opposed to, the best interests of the corporation or (ii) with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful. In the case of proceedings by or in the right of the corporation, Florida law permits indemnification of any person by reason of the fact that such person is or was a director, officer, employee or agent of the corporation or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against liability incurred in connection with such proceeding, including appeals thereof; provided, however, that the officer, director, employee or agent acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification is made where such person is adjudged liable, unless a court of competent jurisdiction determines that, despite the adjudication of liability but in view of all circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper.

To the extent that such person is successful on the merits or otherwise in defending against any such proceeding, Florida law provides that he or she shall be indemnified against expenses actually and reasonably incurred by him or her in connection therewith.

Also, under Florida law, expenses incurred by an officer or director in defending a civil or criminal proceeding may be paid by the corporation in advance of the final disposition of such proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if he or she is ultimately found not to be entitled to indemnification by the corporation pursuant to this section. Expenses incurred by other employees and agents may be paid in advance upon such terms or conditions that the Board of Directors deems appropriate.

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Our articles of incorporation provide that we shall indemnify our officers, directors, and employees, and agents unless specifically approved in writing by the Board of Directors, to the fullest extent authorized by law, and such right to indemnification shall continue as to a person who has ceased to be a director or officer of the Company and

shall inure to the benefit of his or her heirs, executors and personal and legal representatives; provided, however, that, except for proceedings to enforce rights to indemnification, the Company shall not be obligated to indemnify any director or officer (or his or her heirs, executors or personal or legal representatives) in connection with a proceeding (or part thereof) initiated by such person unless such proceeding (or part thereof) was authorized for consented to by the directors of the Company.

The articles of incorporation also provide that such rights of indemnification shall be a contract right and shall include the right to be paid by us for all reasonable expenses incurred in defending any such proceeding in advance of final disposition; provided, however, that the payment of such expenses incurred by a director or officer in his or her capacity as a director or officer in advance of the final disposition of such proceeding shall be made only upon delivery to us of an undertaking, by or on behalf of such director or officer, to repay amounts so advanced if it should be determined ultimately that such director or officer is not entitled to be indemnified by the Company.

In addition to the authority granted to us by Florida law to indemnify our directors, certain other provisions of the FBCA have the effect of further limiting the personal liability of our directors. Pursuant to Florida law, a director of a Florida corporation cannot be held personally liable for monetary damages to the corporation or any other person for any act or failure to act regarding corporate management or policy except in the case of certain qualifying breaches of the director's duties.

Insofar as indemnification for liabilities arising under the Securities Act, as amended, may be permitted to our directors and officers, or to persons controlling us, pursuant to our charter documents and Florida law, we have been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, as amended, and is therefore unenforceable.

Item 16. Exhibits

(a) Exhibits

A list of exhibits filed with this registration statement on Form S-3 is set forth on the Exhibit Index and is incorporated herein by reference.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.
- (2) That for the purpose of determining any liability under the Securities Act of 1933 each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.
- (7) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in Item 14 above, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.
- (8) The undersigned Registrant hereby undertakes:

- (1) That for purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4), or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) That for the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and this offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Jacksonville, State of Florida, on June 12, 2023.

Duos Technologies Group, Inc.

By: /s/ Charles P. Ferry

Name: Charles P. Ferry
 Title: Chief Executive Officer
 (Principal Executive Officer)

POWER OF ATTORNEY: KNOW ALL PERSONS BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints Charles P. Ferry, his true and lawful attorney-in-fact and agent with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to sign any registration statement for the same offering covered by the Registration Statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done or by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
<u>/s/ Charles P. Ferry</u> Charles P. Ferry	Chief Executive Officer (Principal Executive Officer), Director	June 12, 2023
<u>/s/ Andrew W. Murphy</u> Andrew W. Murphy	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	June 12, 2023
<u>/s/ Kenneth Ehrman</u> Kenneth Ehrman	Chairman of the Board	June 12, 2023
<u>/s/ Ned Mavrommatis</u> Ned Mavrommatis	Director	June 12, 2023
<u>/s/ James Craig Nixon</u> James Craig Nixon	Director	June 12, 2023

EXHIBIT INDEX

Exhibit No.	Exhibit Description
4.1 *	Form of Indenture relating to the issuance from time to time in one or more series of debentures, notes, bonds or other evidences of indebtedness
5.1 **	Opinion of Shutts & Bowen LLP
23.1 *	Consent of Salberg & Company, P.A.
24.1 **	Consent of Shutts & Bowen LLP (reference is made to Exhibit 5.1)
24.2 *	Power of Attorney (included on the signature page of this Registration Statement)
107*	Filing Fees Table

* Filed herewith.

** To be filed by amendment or as an exhibit to a report on Form 8-K, Form 10-Q or Form 10-K pursuant to Item 601 of Regulation S-K and incorporated herein by reference.

DUOS TECHNOLOGIES GROUP, INC.

AND

_____,
TRUSTEE

INDENTURE

DATED AS OF

_____, 2023

DEBT SECURITIES

DUOS TECHNOLOGIES GROUP, INC.
RECONCILIATION AND TIE BETWEEN TRUST INDENTURE ACT OF 1939
AND INDENTURE, DATED AS OF _____, 2023

Section of Trust Indenture Act of 1939

Section(s) of Indenture

§ 310(a)(1)	609
(a)(2)	609
(a)(3)	Not Applicable
(a)(4)	Not Applicable
(a)(5)	609
(b)	608, 610
§ 311(a)	613
(b)	613
(c)	Not Applicable
§ 312(a)	701, 702 (a)
(b)	702 (b)
(c)	702 (b)
§ 313(a)	703 (a)
(b)	703 (a)
(c)	703 (a)
(d)	703 (b)
§ 314(a)	704, 1005
(b)	Not Applicable
(c)(1)	103
(c)(2)	103
(c)(3)	Not Applicable
(d)	Not Applicable
(e)	103
§ 315(a)	601 (a)
(b)	602
(c)	601 (b)
(d)	601 (c)
(d)(1)	601 (c) (1)
(d)(2)	601 (c) (2)
(d)(3)	601 (c) (3)
(e)	511
§ 316(a)(1)(A)	505
(a)(1)(B)	504
(a)(2)	Not Applicable
(a)(last sentence)	101
(b)	507
(c)	105
§ 317(a)(1)	503
(a)(2)	509
(b)	1003
§ 318(a)	108
(b)	Not Applicable
(c)	108

Note: This reconciliation and tie shall not, for any purpose, be deemed to be a part of the Indenture.

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INDENTURE

THIS Indenture, dated as of _____, 2023, between Duos Technologies Group, Inc., a corporation duly organized and existing under the laws of the State of Florida (herein called the "Company"), having its principal office at 7660 Centurion Parkway, Suite 100, Jacksonville, Florida 32256, and _____, a _____ banking corporation, as Trustee (herein called the "Trustee") the office of the Trustee at which at the date hereof its corporate trust business is principally administered being _____.

RECITALS OF THE COMPANY

The Company has duly authorized the execution and delivery of this Indenture to provide for the issuance from time to time of its unsecured debentures, notes or other evidences of indebtedness (herein called the "Securities"), to be issued in one or more series as in this Indenture provided.

The Securities of each series will be in such form as may be established by or pursuant to a Board Resolution or in one or more indentures supplemental hereto, in each case with such appropriate insertions, omissions, substitutions, and other variations as are required or permitted by this Indenture, and may have such letters, numbers, or other marks of identification and such legends or endorsements placed thereon as may be required to comply with the rules of any securities exchange or as may, consistently herewith, be determined by the officers executing such Securities, as evidenced by their execution of the Securities.

This Indenture is subject to the provisions of the Trust Indenture Act and the rules and regulations of the SEC promulgated thereunder that are required to be part of this Indenture and, to the extent applicable, shall be governed by such provisions.

All things necessary to make this Indenture a valid agreement of the Company, in accordance with its terms, have been done.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

For and in consideration of the premises and the purchase of the Securities by the Holders thereof, it is mutually covenanted and agreed, for the equal and proportionate benefit of all Holders of the Securities or of series thereof, as follows:

ARTICLE I

**DEFINITIONS AND OTHER PROVISIONS
OF GENERAL APPLICATION**

SECTION 101. DEFINITIONS.

For all purposes of this Indenture, except as otherwise expressly provided or unless the context otherwise requires:

- (1) the terms defined in this Article have the meanings assigned to them in this Article and include the plural as well as the singular;



(2) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with generally accepted accounting principles in the United States, except as otherwise herein expressly provided, the term “generally accepted accounting principles” with respect to any computation required or permitted hereunder shall mean such accounting principles as are generally accepted in the United States at the date of such computation; and

(3) the words “herein,” “hereof” and “hereunder” and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.

Certain terms, used principally in Article V, are defined in Section 102.

“Act” when used with respect to any Holder, has the meaning specified in Section 105.

“Additional Amounts” means any additional amounts that are required by the express terms of a Security or by or pursuant to a Board Resolution, under circumstances specified therein or pursuant thereto, to be paid by the Company with respect to certain taxes, assessments or other governmental charges imposed on certain Holders and that are owing to such Holders.

“Affiliate” of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, “control” when used with respect to any specified Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms “controlling” and “controlled” have meanings correlative to the foregoing.

“Authenticating Agent” means any Person authorized by the Trustee to act on behalf of the Trustee pursuant to Section 614 to authenticate Securities of one or more series.

“Authorized Newspaper” means a newspaper, in the English language or in an official language of the country of publication, customarily published on each Business Day, whether or not published on Saturdays, Sundays or holidays, and of general circulation in the place in connection with which the term is used or in the financial community of such place. Where successive publications are required to be made in Authorized Newspapers, the successive publications may be made in the same or in different newspapers in the same city meeting the foregoing requirements and in each case on any Business Day.

“Board of Directors” means

- (1) with respect to a corporation, the board of directors of the corporation;
- (2) with respect to a partnership, the board of directors of the general partner of the partnership; and
- (3) with respect to any other Person, the board or committee of such Person serving a similar function.

“Board Resolution” means, with respect to any Person, a resolution of such Person duly adopted by the Board of Directors of such Person and in full force and effect.

“Book-Entry Security” has the meaning specified in Section 204.

“Business Day,” when used with respect to any Place of Payment, means each Monday, Tuesday, Wednesday, Thursday and Friday that is not a day on which banking institutions in that Place of Payment or the city in which the Corporate Trust Office is located are authorized or obligated by law or executive order to close.

“Capital Lease Obligation” means, at the time any determination thereof is to be made, the amount of the liability in respect of a capital lease that would at that time be required to be capitalized on a balance sheet in accordance with GAAP.

“Capital Stock” means:

- (i) in the case of a corporation, corporate stock;
- (ii) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock;
- (iii) in the case of a partnership or limited liability company, partnership or membership interests (whether general or limited); and
- (iv) any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of assets of, the issuing Person.

“Company” means the Person named as the “Company” in the first paragraph of this instrument until a successor Person shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Company” shall mean such successor Person.

“Company Request” and “Company Order” mean, respectively, a written request or order signed in the name of the Company by its Chairman of the Board, its President or a Vice President, and by its Treasurer, an Assistant Treasurer, its Controller, an Assistant Controller, its Secretary or an Assistant Secretary, and delivered to the Trustee.

“Corporate Trust Office” means the office of the Trustee at which at any particular time its corporate trust business shall be principally administered, which office at the date hereof is that indicated in the introductory paragraph of this Indenture or such other address as the Trustee may designate from time to time by notice to the Holders and the Company.

“Currency Agreement” means, with respect to any specified Person, any foreign exchange contract, currency swap agreement or other similar agreement or arrangement designed to protect such specified Person against fluctuations in currency values.

“Default” means an event or condition the occurrence of which is, or with the lapse of time or the giving of notice or both would be, an Event of Default.

“Defaulted Interest” has the meaning specified in Section 307.

“Depository” means, with respect to the Securities of any series issuable or issued in the form of a global Security, the Person designated as Depository by the Company pursuant to Section 301 until a successor Depository shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Depository” shall mean or include each Person who is then a Depository hereunder, and if at any time there is more than one such person, “Depository” as used with respect to the Securities of any series shall mean the Depository with respect to the Securities of that series.

“Dollar” or “\$” means a dollar or other equivalent unit in such coin or currency of the United States as at the time shall be legal tender for the payment of public and private debts.

“Event of Default” has the meaning specified in Section 501.

“GAAP” means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as may be approved by a significant segment of the accounting profession of the United States of America, as in effect as of the date of issuance of Securities.

“Guarantee” means a guarantee (other than by endorsement of negotiable instruments for collection in the ordinary course of business), direct or indirect, in any manner (including, without limitation, by way of a pledge of assets or through letters of credit or reimbursement agreements), of all or any part of Indebtedness.

“Guarantor” means any Subsidiary that incurs a Guarantee.

“Hedging Agreement” means, with respect to any Person, any agreement with respect to the hedging of price risk associated with the purchase of commodities used in the business of such Person, so long as any such agreement has been entered into in the ordinary course of business and not for purposes of speculation.

“Holder” when used with respect to any Security, means the Person in whose name the Security is registered in the Security Register.

“Indebtedness” means, with respect to any specified Person, any indebtedness of such Person, whether or not contingent, in respect of:

- (1) borrowed money;
- (2) evidenced by bonds, notes, debentures or similar instruments or letters of credit (or reimbursement agreements in respect thereof) (other than obligations with respect to letters of credit securing obligations (other than obligations described in clause (1), (2) and (4) of this definition) entered into in the ordinary course of business of such Person to the extent that such letters of credit are not drawn upon);
- (3) banker’s acceptances;
- (4) any Capital Lease Obligations;
- (5) the balance deferred and unpaid of the purchase price of any property, except any such balance that constitutes an accrued expense or trade payable incurred in the ordinary course of business; or
- (6) any Hedging Agreements,

if and to the extent any of the preceding items (other than letters of credit and Hedging Agreements) would appear as a liability upon a balance sheet of the specified Person prepared in accordance with GAAP. In addition, the term “Indebtedness” includes all Indebtedness of others secured by a Lien on any asset of the specified Person (whether or not such Indebtedness is assumed by the specified Person) and, to the extent not otherwise included, the guarantee by the specified Person of any indebtedness of any other Person.

The amount of any Indebtedness outstanding as of any date shall be:

- (1) the accreted value thereof, in the case of any Indebtedness issued with original issue discount; and
- (2) the principal amount thereof, together with any interest thereon that is more than 30 days past due, in the case of any other Indebtedness.

“Indenture” means this instrument as originally executed or as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof and shall include the terms of particular series of Securities established as contemplated by Section 301 and the provisions of the Trust Indenture Act that are deemed to be a part of and govern this instrument.

“Interest Payment Date,” means the Stated Maturity of an installment of interest on such Security.

“Interest Swap Obligations,” means the obligations of any Person pursuant to any arrangement with any other Person, whereby directly or indirectly, such Person is entitled to receive from time to time periodic payments calculated by applying either a floating or a fixed rate of interest on a stated notional amount in exchange for periodic payments made by such other Person calculated by applying a fixed or a floating rate of interest on the same notional amount and shall include, without limitation, interest rate swaps, options, caps, floors, collars and similar agreements.

“Lien” means any lien, mortgage, deed of trust, pledge, security interest, charge or encumbrance of any kind (including any conditional sale or other title retention agreement, any lease in the nature thereof and any agreement to give any security interest).

“Maturity,” when used with respect to any Security, means the date on which the principal of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, call for redemption or otherwise.

“Officers’ Certificate” means a certificate signed by the Chairman of the Board, the President or a Vice President, and by the Treasurer, the Controller, the Secretary or an Assistant Treasurer, Assistant Controller or Assistant Secretary, of the Company, and delivered to the Trustee, which certificate shall be in compliance with Section 103 hereof.

“Opinion of Counsel” means a written opinion of counsel, who may be counsel for or an employee of the Company, rendered, if applicable, in accordance with Section 314(c) of the Trust Indenture Act, which opinion shall be in compliance with Section 103 hereof.

“Original Issue Discount Security” means any Security that provides for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 502.

“Outstanding” when used with respect to Securities, means, as of the date of determination, all Securities theretofore authenticated and delivered under this Indenture, except:

(i) Securities theretofore cancelled by the Trustee or delivered to the Trustee for cancellation;

(ii) Securities for whose payment or redemption money in the necessary amount has been theretofore irrevocably deposited with the Trustee or any Paying Agent (other than the Company) in trust or set aside and segregated in trust by the Company (if the Company shall act as its own Paying Agent) for the Holders of such Securities; *provided* that, if such Securities are to be redeemed, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made; and

(iii) Securities that have been paid pursuant to Section 306 or in exchange for or in lieu of which other Securities have been authenticated and delivered pursuant to this Indenture, other than any such Securities in respect of which there shall have been presented to the Trustee proof satisfactory to it that such Securities are held by a bona fide purchaser in whose hands such Securities are valid obligations of the Company;

provided, however, that in determining whether the Holders of the requisite principal amount of the Outstanding Securities have given any request, demand, authorization, direction, notice, consent or waiver hereunder, or whether a quorum is present at a meeting of Holders of Securities, (a) the principal amount of an Original Issue Discount Security that shall be deemed to be Outstanding for such purposes shall be the principal amount thereof that would be due and payable as of the date of such determination upon acceleration of the Maturity thereof pursuant to Section 502, (b) the principal amount of a Security denominated in a foreign currency shall be the U.S. Dollar equivalent, determined by the Company on the date of original issuance of such Security, of the principal amount (or, in the case of an Original Issue Discount Security, the U.S. Dollar equivalent, determined on the date of original issuance of such Security, of the amount determined as provided in (a) above), of such Security and (c) Securities owned by the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor shall be disregarded and deemed not to be Outstanding, except that, in determining whether the Trustee shall be protected in relying upon any such request, demand, authorization, direction, notice, consent or waiver or upon any such determination as to the presence of a quorum, only Securities which the Trustee knows to be so owned shall be so disregarded. Securities so owned which have been pledged in good faith may be regarded as Outstanding if the pledgee establishes to the satisfaction of the Trustee the pledgee's right so to act with respect to such Securities and that the pledgee is not the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor.

“Paying Agent” means any Person, which may include the Company, authorized by the Company to pay the principal of (and premium, if any) or interest on any one or more series of Securities on behalf of the Company.

“Person” means an individual, partnership, corporation, limited liability company, unincorporated organization, trust or joint venture, or a governmental agency or political subdivision thereof.

“Place of Payment” when used with respect to the Securities of any series, means the place or places where the principal of (and premium, if any) and interest on the Securities of that series are payable as specified in accordance with Section 301 subject to the provisions of Section 1002.

“Post-Petition Interest” means any interest that accrues after the commencement of any case, proceeding or other action relating to the bankruptcy, insolvency or reorganization of the Company (or would accrue but for the operation of applicable bankruptcy or insolvency laws), whether or not such interest is allowed or allowable as a claim in any such proceeding.

“Predecessor Security” of any particular Security means every previous Security evidencing all or a portion of the same debt as that evidenced by such particular Security; and, for the purposes of this definition, any Security authenticated and delivered under Section 306 in exchange for or in lieu of a mutilated, destroyed, lost or stolen Security shall be deemed to evidence the same debt as the mutilated, destroyed, lost or stolen Security.

“Redemption Date” when used with respect to any Security to be redeemed, means the date fixed for such redemption by or pursuant to this Indenture.

“Redemption Price” when used with respect to any Security to be redeemed, means the price at which it is to be redeemed pursuant to this Indenture.

“Registered Security” means any Security in the form established pursuant to Section 201 which is registered in the Security Register.

“Regular Record Date” for the interest payable on any Interest Payment Date on the Registered Securities of any series means the date specified for that purpose as contemplated by Section 301, or, if not so specified, the last day of the calendar month preceding such Interest Payment Date if such Interest Payment Date is the fifteenth day of the calendar month or the fifteenth day of the calendar month preceding such Interest Payment Date if such Interest Payment Date is the first day of a calendar month, whether or not such day shall be a Business Day.

“Responsible Officer” when used with respect to the Trustee, means any officer within the corporate trust department of the Trustee including any vice-president, assistant vice-president, assistant treasurer, trust officer or any other officer who customarily performs functions similar to those performed by the Persons who at the time shall be such officers who have direct responsibility for the administration of the Indenture and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of his knowledge of and familiarity with the particular subject.

“Securities” has the meaning stated in the first recital of this Indenture and more particularly means any Securities authenticated and delivered under this Indenture.

“Security Register” and “Security Registrar” have the respective meanings specified in Section 305.

“Special Record Date” for the payment of any Defaulted Interest on the Registered Securities of any series means a date fixed by the Trustee pursuant to Section 307.

“Stated Maturity” when used with respect to any Security or any installment of principal thereof or interest thereon, means the date specified in such Security as the fixed date on which the principal of such Security or such installment of principal or interest is due and payable.

“Subsidiary” means, with respect to any specified Person:

- (i) any corporation of which the outstanding Capital Stock having at least a majority of the votes entitled to be cast in the election of directors under ordinary circumstance shall at the time be owned, directly or indirectly by such Person; or
- (ii) any other Person of which at least a majority of the voting interest under ordinary circumstances is at the time, directly or indirectly, owned by such Person.

“Trustee” means the Person named as the “Trustee” in the first paragraph of this instrument until a successor Trustee shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Trustee” shall mean or include each Person who is then a Trustee hereunder, and if at any time there is more than one such Person, “Trustee” as used with respect to the Securities of any series shall mean the Trustee with respect to Securities of that series.

“Trust Indenture Act” means the Trust Indenture Act of 1939 as in force at the date as of which this instrument was executed, except as provided in Section 903.

“United States” means the United States of America (including the States and the District of Columbia) and its “possessions,” which include Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and the Northern Mariana Islands.

“United States Alien” means any Person who, for United States federal income tax purposes, is a foreign corporation, a nonresident alien individual, a nonresident alien or foreign fiduciary of an estate or trust, or a foreign partnership.

“U.S. Government Obligations” means direct noncallable obligations of, or noncallable obligations the payment of principal of and interest on which is guaranteed by, the United States of America, or to the payment of which obligations or guarantees the full faith and credit of the United States of America is pledged, or beneficial interests in a trust the corpus of which consists exclusively of money or such obligations or a combination thereof.

“Vice President” when used with respect to the Company or the Trustee, means any vice president, whether or not designated by a number or a word or words added before or after the title “vice president”.

“Wholly Owned Subsidiary” of any Person means any Subsidiary of such Person of which all the outstanding voting securities (other than in the case of a Restricted Subsidiary that is incorporated in a jurisdiction other than a State in the United States of America or the District of Columbia, directors’ qualifying shares or an immaterial amount of shares required to be owned by other Persons pursuant to applicable law) are owned by such Person or any Wholly Owned Subsidiary of such Person.

“Yield to Maturity” when used with respect to any Original Issue Discount Security, means the yield to maturity, if any, set forth on the face thereof.

SECTION 102. INCORPORATION BY REFERENCE OF TRUST INDENTURE ACT.

Whenever this Indenture refers to a provision of the Trust Indenture Act, the provision is incorporated by reference in and made a part of this Indenture. The following Trust Indenture Act terms used in this Indenture have the following meanings:

“Bankruptcy Act” means the Bankruptcy Act or Title 11 of the United States Code, as amended.

“indenture securities” means the Securities.

“indenture securityholder” means a Holder.

“indenture to be qualified” means this Indenture.

“indenture trustee” or “institutional trustee” means the Trustee.

“obligor” on the indenture securities means the Company or any other obligor on the Securities.

All terms used in this Indenture that are defined by the Trust Indenture Act, defined by Trust Indenture Act reference to another statute or defined by SEC rule under the Trust Indenture Act and not otherwise defined herein have the meanings assigned to them therein.

SECTION 103. COMPLIANCE CERTIFICATES AND OPINIONS.

Except as otherwise expressly provided by this Indenture, upon any application or request by the Company to the Trustee to take any action under any provision of this Indenture, the Company shall furnish to the Trustee an Officers’ Certificate stating that all conditions precedent, if any (including any covenants the compliance with which constitutes a condition precedent), provided for in this Indenture relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such conditions precedent, if any (including any covenants the compliance with which constitutes a condition precedent), have been complied with, except that in the case of any such application or request as to which the furnishing of such documents is specifically required by any provision of this Indenture relating to such particular application or request, no additional certificate or opinion need be furnished.

Every certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture shall include

- (1) a statement that each Person signing such certificate or opinion has read such covenant or condition and the definitions herein relating thereto;
- (2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based
- (3) a statement that, in the opinion of each such Person, such Person has made such examination or investigation as is necessary to enable such Person to express an informed opinion as to whether or not such covenant or condition has been complied with; and
- (4) a statement as to whether or not, in the opinion of each such Person, such condition or covenant has been complied with.

SECTION 104. FORM OF DOCUMENTS DELIVERED TO TRUSTEE.

In any case where several matters are required to be certified by, or covered by an opinion of, any specified Person, it is not necessary that all such matters be certified by, or covered by the opinion of, only one such Person, or that they be so certified or covered by only one document, but one such Person may certify or give an opinion with respect to some matters and one or more other such Persons as to other matters, and any such Person may certify or give an opinion as to such matters in one or several documents.

Any certificate or opinion of an officer of the Company may be based, insofar as it relates to legal matters, upon a certificate or opinion of, or representations by, counsel, unless such officer knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to the matters upon which his certificate or opinion is based are erroneous. Any such certificate or Opinion of Counsel may be based, insofar as it relates to factual matters, upon a certificate or opinion of, or representations by, an officer or officers of the Company stating that the information with respect to such factual matters is in the possession of the Company, unless such counsel knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to such matters are erroneous.

Where any Person is required to make, give or execute two or more applications, requests, consents, certificates, statements, opinions or other instruments under this Indenture, they may, but need not, be consolidated and form one instrument.

SECTION 105. ACTS OF HOLDERS; RECORD DATES.

(1) Any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders may be embodied in a by one or more instruments of substantially similar tenor signed by such Holders in person or by an agent duly appointed in writing. Except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments or record or both are delivered to the Trustee and, where it is hereby expressly required, to the Company. Such instrument or instruments and any such record (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the "Act" of the Holders signing such instrument or instruments and so voting at any such meeting. Proof of execution of any such instrument or of a writing appointing any such agent, or the holding of any Person of a Security, shall be sufficient for any purpose of this Indenture and (subject to Section 601) conclusive in favor of the Trustee and the Company, if made in the manner provided in this Section. The record of any meeting of Holders of Securities shall be proved in the manner provided in Section 1306.

The Company may set in advance a record date for purposes of determining the identity of Holders of Registered Securities entitled to vote or consent to any action by vote or consent authorized or permitted under this Indenture. If not set by the Company prior to the first solicitation of a Holder of Registered Securities of such series made by any Person in respect of any such action, or in the case of any such vote, prior to such vote, the record date for any such action or vote shall be the later of 30 days prior to such first solicitation of such consent or the date of the most recent list of Holders furnished to the Trustee prior to such solicitation. If a record date is fixed, those Persons who were Holders of Outstanding Registered Securities at such record date (or their duly designated proxies), and only those Persons, shall be entitled with respect to such Securities to take such action by vote or consent or to revoke any vote or consent previously given, whether or not such Persons continue to be Holders after such record date. Promptly after any record date is set pursuant to this paragraph, the Company, at its own expense, shall cause notice thereof to be given to the Trustee in writing in the manner provided in Section 106 and to the relevant Holders as set forth in Section 107.

(2) The fact and date of the execution by any Person of any such instrument or writing may be proved by the affidavit of a witness of such execution or by a certificate of a public or other officer authorized by law to take acknowledgments of deeds, certifying that the individual signing such instrument or writing acknowledged to him the execution thereof. Where such execution is by a signer acting in a capacity other than his individual capacity, such certificate or affidavit shall also constitute sufficient proof of his authority. The fact and date of the execution of any such instrument or writing, or the authority of the Person executing the same, may also be proved in any other manner which the Trustee deems sufficient.

(3) The principal amount and serial numbers of Registered Securities held by any Person, and the date of holding the same, shall be proved by the Security Register.

(4) Any request, demand, authorization, direction, notice, consent, waiver or other Act of the Holder of any Security shall bind every future Holder of the same Security and of every Security issued upon the registration of transfer thereof or in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee or the Company in reliance thereon, whether or not notation of such action is made upon such Security. Any Holder or subsequent Holder may revoke the request, demand, authorization, direction, notice, consent or other Act as to his Security or portion of his Security; *provided, however*, that such revocation shall be effective only if the Trustee receives the notice of revocation before the date the Act becomes effective.

SECTION 106. NOTICES, ETC., TO TRUSTEE AND COMPANY.

Any request, demand, authorization, direction, notice, consent, waiver or Act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with,

(1) the Trustee by any Holder or by the Company shall be sufficient for every purpose hereunder if made, given, furnished or filed in writing to or with the Trustee at its Corporate Trust Office, Attention: Corporate Trust Administration, or

(2) the Company by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed, first class postage prepaid, to the Company addressed to it at the address of its principal office specified in the first paragraph of this Indenture or at any other address previously furnished in writing to the Trustee by the Company, Attention: Corporate Secretary.

The Company or the Trustee, by notice to the other, may designate additional or different addresses for subsequent notices or communications.

All notices and communications (other than those sent to the Trustee) shall be deemed to have been duly given: at the time delivered by hand, if personally delivered; five Business Days after being deposited in the mail, postage prepaid, if mailed; when receipt acknowledged, if telecopied; and the next Business Day after timely delivery to the courier, if sent by overnight air courier guaranteeing next-day delivery. All notices and communications to the Trustee shall be deemed duly given and effective only upon receipt.

Any notice or communication to a Holder shall be mailed by first class mail, certified or registered, return receipt requested, or by overnight air courier guaranteeing next-day delivery to its address shown on the Security Register. Any notice or communication shall also be so mailed to any Person described in TIA Section 313(c), to the extent required by the TIA. Failure to mail a notice or communication to a Holder or any defect in it shall not affect its sufficiency with respect to other Holders.

If a notice or communication is mailed in the manner provided above within the time prescribed, it is duly given, whether or not the addressee receives it.

If the Company mails a notice or communication to Holders, it shall mail a copy to the Trustee and each Agent at the same time.

SECTION 107. NOTICE TO HOLDERS; WAIVER.

Where this Indenture provides for notice to Holders of Securities of any event, such notice shall be sufficiently given (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to each Holder affected by such event, at the address of such Holder as it appears in the Security Register, not later than the latest date, and not earlier than the earliest date, prescribed for the giving of such notice.

In case by reason of the suspension of regular mail service, or by reason of any other cause it shall be impracticable to give such notice to Holders of Registered Securities by mail, then such notification as shall be made with the approval of the Trustee shall constitute a sufficient notification for every purpose hereunder. In any case in which notice to Holders of Registered Securities is given by mail, neither the failure to mail such notice, nor any defect in any notice so mailed, to any particular Holder of a Registered Security, shall affect the sufficiency of such notice with respect to other Holders of Registered Securities.

Where this Indenture provides for notice in any manner, such notice may be waived in writing by the Person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by Holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

SECTION 108. CONFLICT WITH TRUST INDENTURE ACT.

If any provision hereof limits, qualifies or conflicts with any provision of the Trust Indenture Act or another provision hereof required to be included in this Indenture by any of the provisions of the Trust Indenture Act, such provision of the Trust Indenture Act shall control. If any provision of this Indenture modifies or excludes any provision of the Trust Indenture Act that may be so modified or excluded, the former provision shall be deemed to apply to this Indenture as so modified or to be excluded.

SECTION 109. EFFECT OF HEADINGS AND TABLE OF CONTENTS.

The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

SECTION 110. SUCCESSORS AND ASSIGNS.

All covenants and agreements in this Indenture by the Company shall bind its successors and assigns, whether or not so expressed.

SECTION 111. SEPARABILITY CLAUSE.

In case any provision in this Indenture or in the Securities shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

SECTION 112. BENEFITS OF INDENTURE.

Nothing in this Indenture or in the Securities, express or implied, shall give to any Person, other than the parties hereto and their successors hereunder, any Authenticating Agent, Paying Agent and Security Registrar, and the Holders, any benefit or any legal or equitable right, remedy or claim under this Indenture.

SECTION 113. GOVERNING LAW.

This Indenture and the Securities shall be governed by and construed in accordance with the laws of the State of New York, but without giving effect to applicable principles of conflicts of law to the extent the application of the laws of another jurisdiction would be required thereby.

SECTION 114. LEGAL HOLIDAYS.

In any case where any Interest Payment Date, Redemption Date or Stated Maturity of any Security shall not be a Business Day at any Place of Payment, then (notwithstanding any other provision of this Indenture or of the Securities) payment of principal and interest (and premium and Additional Amounts, if any) need not be made at such Place of Payment on such date, but may be made on the next succeeding Business Day at such Place of Payment with the same force and effect as if made on the Interest Payment Date or Redemption Date, or at the Stated Maturity, *provided* that no interest shall accrue for the period from and after such Interest Payment Date, Redemption Date or Stated Maturity, as the case may be.

SECTION 115. CORPORATE OBLIGATION.

No recourse may be taken, directly or indirectly, against any incorporator, subscriber to the capital stock, stockholder, officer, director or employee of the Company or the Trustee or of any predecessor or successor of the Company or the Trustee with respect to the Company's obligations on the Securities or the obligations of the Company or the Trustee under this Indenture or any certificate or other writing delivered in connection herewith.

SECTION 116. WAIVER OF TRIAL JURY.

EACH OF THE COMPANY AND THE TRUSTEE HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS INDENTURE, THE NOTES OR THE TRANSACTION CONTEMPLATED HEREBY.

SECTION 117. FORCE MAJEURE.

In no event shall the Trustee be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including, without limitation, strikes, work stoppages, accidents, acts of war or terrorism, civil or military disturbances, nuclear or natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the Trustee shall use reasonable efforts which are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances.

ARTICLE II
SECURITY FORMS

SECTION 201. FORMS GENERALLY.

The Securities of each series shall be Registered Securities and shall be in substantially such form or forms (including temporary or permanent global form) as shall be established by or pursuant to a Board Resolution or in one or more indentures supplemental hereto, in each case with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture and may have such letters, numbers or other marks of identification and such legends or endorsements placed thereon as may be required to comply with the rules of any securities exchange or as may, consistently herewith, be determined by the officers executing such Securities, as evidenced by their execution of the Securities. If temporary Securities of any series are issued in global form as permitted by Section 304, the form thereof shall be established as provided in the preceding sentence. A copy of the Board Resolution establishing the form or forms of Securities of any series (or any such temporary global Security) shall be delivered to the Trustee at or prior to the delivery of the Company Order contemplated by Section 303 for the authentication and delivery of such Securities (or any such temporary global Security).

The definitive Securities shall be printed, lithographed or engraved on steel engraved borders or may be produced in any other manner, all as determined by the officers executing such Securities, as evidenced by their execution thereof.

SECTION 202. FORM OF TRUSTEE'S CERTIFICATE OF AUTHENTICATION.

The Trustee's certificate of authentication shall be in substantially the following form:

"This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture.

By _____
AUTHORIZED OFFICER"

SECTION 203. SECURITIES IN GLOBAL FORM.

If Securities of a series are issuable in global form, as contemplated by Section 301, then, notwithstanding clause (10) of Section 301 and the provisions of Section 302, any such Security shall represent such of the Outstanding Securities of such series as shall be specified therein and may provide that it shall represent the aggregate amount of Outstanding Securities from time to time endorsed thereon and that the aggregate amount of Outstanding Securities represented thereby may from time to time be reduced to reflect exchanges. Any endorsement of a Security in global form to reflect the amount, or any increase or decrease in the amount, of Outstanding Securities represented thereby shall be made by the Trustee in such manner and upon instructions given by such Person or Persons as shall be specified in such Security or in a Company Order to be delivered to the Trustee pursuant to Section 303 or Section 304. Subject to the provisions of Section 303 and, if applicable, Section 304, the Trustee shall deliver and redeliver any Security in permanent global form in the manner and upon instructions given by the Person or Persons specified in such Security or in the applicable Company Order. If a Company Order pursuant to Section 303 or 304 has been, or simultaneously is, delivered, any instructions by the Company with respect to endorsement or delivery or redelivery of a Security in global form shall be in writing but need not comply with Section 103 and need not be accompanied by an Opinion of Counsel.

The provisions of the last sentence of Section 303 shall apply to any Security in global form if such Security was never issued and sold by the Company and the Company delivers to the Trustee the Security in global form together with written instructions (which need not comply with Section 103 and need not be accompanied by an Opinion of Counsel) with regard to the reduction in the principal amount of Securities represented thereby, together with the written statement contemplated by the last sentence of Section 303.

Notwithstanding the provisions of Sections 201 and 307, unless otherwise specified as contemplated by Section 301, payment of principal of (and premium, if any) and interest on any Security in permanent global form shall be made to the Person or Persons specified therein.

Notwithstanding the provisions of Section 308 and except as provided in the preceding paragraph, the Company, the Trustee and any agent of the Company or of the Trustee shall treat a Person as the Holder of such principal amount of Outstanding Securities represented by a global Security as shall be specified in a written statement, if any, of the Holder of such global Security, which is produced to the Security Registrar by such Holder.

Global Securities may be issued in either temporary or permanent form. Permanent global Securities will be issued in definitive form.

SECTION 204. BOOK-ENTRY SECURITIES.

Notwithstanding any provision of this Indenture to the contrary:

(a) At the discretion of the Company, any Registered Security may be issued from time to time, in whole or in part, in permanent global form registered in the name of a Depository, or its nominee. Each such Registered Security in permanent global form is hereafter referred to as a "Book-Entry Security." Subject to Section 303, upon such election, the Company shall execute, and the Trustee or an Authenticating Agent shall authenticate and deliver, one or more Book-Entry Securities that (i) are denominated in an amount equal to the aggregate principal amount of the Outstanding Securities of such series if elected in whole or such lesser amount if elected in part, (ii) are registered in the name of the Depository or its nominee, (iii) are delivered by the Trustee or an Authenticating Agent to the Depository or pursuant to the Depository's instructions and (iv) bear a legend in substantially the following form (or such other form as the Depository and the Company may agree upon):

UNLESS THIS SECURITY IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF [THE DEPOSITARY], TO THE COMPANY OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF [NOMINEE OF THE DEPOSITARY] OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF [THE DEPOSITARY] (AND ANY PAYMENT IS MADE TO [NOMINEE OF THE DEPOSITARY] OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF [THE DEPOSITARY]), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, [NOMINEE OF THE DEPOSITARY], HAS AN INTEREST HEREIN.

(b) Any Book-Entry Security shall be initially executed and delivered as provided in Section 303. Notwithstanding any other provision of this Indenture, unless and until it is exchanged in whole or in part for Registered Securities not issued in global form, a Book-Entry Security may not be transferred except as a whole by the Depository to a nominee of such Depository, by a nominee of such Depository to such Depository or another nominee of such Depository, or by such Depository or any such nominee to a successor Depository or a nominee of such successor Depository.

(c) If at any time the Depositary notifies the Company or the Trustee that it is unwilling or unable to continue as Depositary for any Book-Entry Securities, the Company shall appoint a successor Depositary, whereupon the retiring Depositary shall surrender or cause the surrender of its Book-Entry Security or Securities to the Trustee. The Trustee shall promptly notify the Company upon receipt of such notice. If a successor Depositary has not been so appointed by the effective date of the resignation of the Depositary, the Book-Entry Securities will be issued as Registered Securities not issued in global form, in an aggregate principal amount equal to the principal amount of the Book-Entry Security or Securities theretofore held by the Depositary.

The Company may at any time and in its sole discretion determine that the Securities shall no longer be Book-Entry Securities represented by a global certificate or certificates, and will so notify the Depositary. Upon receipt of such notice, the Depositary shall promptly surrender or cause the surrender of its Book-Entry Security or Securities to the Trustee. Concurrently therewith, Registered Securities not issued in global form will be issued in an aggregate principal amount equal to the principal amount of the Book-Entry Security or Securities theretofore held by the Depositary.

Upon any exchange of Book-Entry Securities for Registered Securities not issued in global form as set forth in this Section 204(c), such Book-Entry Securities shall be cancelled by the Trustee, and Securities issued in exchange for such Book-Entry Securities pursuant to this Section shall be registered in such names and in such authorized denominations as the Depositary for such Book-Entry Securities, pursuant to instructions from its direct or indirect participants or otherwise, shall instruct the Trustee. The Trustee or any Authenticating Agent shall deliver such Securities to the Persons in whose names such Securities are so registered.

(d) The Company and the Trustee shall be entitled to treat the Person in whose name any Book-Entry Security is registered as the Holder thereof for all purposes of the Indenture and any applicable laws, notwithstanding any notice to the contrary received by the Trustee or the Company; and the Trustee and the Company shall have no responsibility for transmitting payments to, communication with, notifying, or otherwise dealing with any beneficial owners of any Book-Entry Security. Neither the Company nor the Trustee shall have any responsibility or obligations, legal or otherwise, to the beneficial owners or to any other party including the Depositary, except for the Holder of any Book-Entry Security; *provided however*, notwithstanding anything herein to the contrary, (i) for the purposes of determining whether the requisite principal amount of Outstanding Securities have been made or taken any request, demand, authorization, direction, notice, consent, waiver, instruction or other action hereunder as of any date, the Trustee shall treat any Person specified in a written statement of the Depositary with respect to any Book-Entry Securities as the Holder of the principal amount of such Securities set forth therein and (ii) nothing herein shall prevent the Company, the Trustee, or any agent of the Company or Trustee, from giving effect to any written certification, proxy or other authorization furnished by a Depositary with respect to any Book-Entry Securities, or impair, as between a Depositary and holders of beneficial interests in such Securities, the operation of customary practices governing the exercise of the rights of the Depositary as Holder of such Securities.

(e) So long as any Book-Entry Security is registered in the name of a Depositary or its nominee, all payments of the principal of (and premium, if any) and interest on such Book-Entry Security and redemption thereof and all notices with respect to such Book-Entry Security shall be made and given, respectively, in the manner provided in the arrangements of the Company with such Depositary.

ARTICLE III
THE SECURITIES

SECTION 301. AMOUNT UNLIMITED; ISSUABLE IN SERIES.

The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is unlimited.

The Securities may be issued in one or more series. There shall be established in or pursuant to a Board Resolution, and set forth in an Officers' Certificate, or established in one or more indentures supplemental hereto, prior to the issuance of Securities of any series:

- (1) the title of the Securities of the series (which shall distinguish the Securities of the series from all other Securities);
- (2) any limit, if any, upon the aggregate principal amount of the Securities of the series that may be authenticated and delivered under this Indenture (except for Securities authenticated and delivered upon registration or transfer of, or in exchange for, or in lieu of, other Securities of the series pursuant to Section 304, 305, 306, 905 or 1107);
- (3) whether Securities of the series are to be issuable as Registered Securities, whether any Securities of the series are to be issuable initially in temporary global form and whether any Securities of the series are to be issuable in permanent global form, as Book-Entry Securities or otherwise, and, if so, whether beneficial owners of interests in any such permanent global Security may exchange such interests for Securities of such series and of like tenor of any authorized form and denomination and the circumstances under which any such exchanges may occur, if other than in the manner provided in Section 305, and the Depositary for any global Security or Securities;
- (4) the manner in which any interest payable on a temporary global Security on any Interest Payment Date will be paid if other than in the manner provided in Section 304;
- (5) the date or dates on which the principal of (and premium, if any, on) the Securities of the series is payable or the method of determination thereof;
- (6) the rate or rates, or the method of determination thereof, at which the Securities of the series shall bear interest, if any, whether and under what circumstances Additional Amounts with respect to such Securities shall be payable, the date or dates from which such interest shall accrue, the Interest Payment Dates on which such interest shall be payable and, if other than as set forth in Section 101, the Regular Record Date for the interest payable on any Registered Securities on any Interest Payment Date;
- (7) if other than the Corporate Trust Office of the Trustee, the place or places where, subject to the provisions of Section 1002, the principal of (and premium, if any), any interest on and any Additional Amounts with respect to the Securities of the series shall be payable;
- (8) the period or periods within which, the price or prices (whether denominated in cash, securities or otherwise) at which and the terms and conditions upon which Securities of the series may be redeemed, in whole or in part, at the option of the Company, if the Company is to have that option, and the manner in which the Company must exercise any such option;

- (9) the obligation, if any, of the Company to redeem or purchase Securities of the series pursuant to any sinking fund or analogous provisions or at the option of a Holder thereof and the period or periods within which, the price or prices (whether denominated in cash, securities or otherwise) at which and the terms and conditions upon which Securities of the series shall be redeemed or purchased in whole or in part pursuant to such obligation;
- (10) the denomination in which any Registered Securities of that series shall be issuable, if other than denominations of \$2,000 and any integral multiple of \$1,000 in excess thereof;
- (11) the currency or currencies (including composite currencies) in which payment of the principal of (and premium, if any), any interest on and any Additional Amounts with respect to the Securities of the series shall be payable if other than the currency of the United States of America;
- (12) if the principal of (and premium, if any) or interest on the Securities of the series are to be payable, at the election of the Company or a Holder thereof, in a currency or currencies (including composite currencies) other than that in which the Securities are stated to be payable, the currency or currencies (including composite currencies) in which payment of the principal of (and premium, if any) and interest on and any Additional Amounts with respect to Securities of such series as to which such election is made shall be payable, and the periods within which and the terms and conditions upon which such election is to be made;
- (13) if the amount of payments of principal of (and premium, if any), any interest on and any Additional Amounts with respect to the Securities of the series may be determined with reference to any commodities, currencies or indices, or values, rates or prices, the manner in which such amounts shall be determined;
- (14) if other than the entire principal amount thereof, the portion of the principal amount of Securities of the series that shall be payable upon declaration of acceleration of Maturity thereof pursuant to Section 502;
- (15) any additional means of satisfaction and discharge of this Indenture with respect to Securities of the series pursuant to Section 401, any additional conditions to discharge pursuant to Section 401, 402, 403, 404, or 405, and the application, if any, of Section 403 and 404;
- (16) any deletions or modifications of or additions to the Events of Default set forth in Section 501, the right of the Trustee or the requisite Holders of such Securities to declare the principal amount thereof due and payable pursuant to Section 502, or the covenants of the Company set forth in Article X pertaining to the Securities of the series;
- (17) the terms, if any, on which the Securities of any series may be converted into or exchanged for stock or other securities of the Company or other entities, any specific terms relating to the adjustment thereof and the period during which such Securities may be so converted or exchanged;
- (18) whether the Securities of a series will be issued as part of units consisting of Securities and other securities of the Company or another issuer; and
- (19) any other terms of the series permitted under the provisions of the Trust Indenture Act.

All Securities of any one series shall be substantially identical except, in the case of Registered Securities, as to denomination and except as may otherwise be provided in or pursuant to the Board Resolution referred to above and (subject to Section 303) set forth, or determined in the manner provided, in the Officers' Certificate referred to above or in any such indenture supplemental hereto.

All Securities of any one series need not be issued at the same time and, unless otherwise provided in such Board Resolution or supplemental indenture, a series may be reopened for issuances of additional Securities of such series pursuant to a Board Resolution or in any indenture supplemental hereto.

At the option of the Company, interest on the Registered Securities of any series that bears interest may be paid by mailing a check or otherwise transmitting payment to the address of any Holder as such address shall appear in the Security Register.

If any of the terms of the series are established by action taken pursuant to a Board Resolution, a copy of an appropriate record of such action together with such Board Resolution shall be certified by the Secretary or an Assistant Secretary of the Company and delivered to the Trustee at or prior to the delivery of the Officers' Certificate setting forth the terms of the series.

SECTION 302. DENOMINATIONS.

The Securities of each series shall be issuable in such denominations as shall be specified as contemplated by Section 301. In the absence of any such provisions with respect to the Securities of any series, the Registered Securities of such series denominated in Dollars shall be issuable in denominations of \$2,000 and any integral multiple of \$1,000 in excess thereof. Unless otherwise provided as contemplated by Section 301 with respect to any series of Securities, any Securities of a series denominated in a currency other than Dollars shall be issuable in denominations that are the equivalent, as determined by the Company by reference to the noon buying rate in the City of New York for cable transfers for such currency, as such rate is reported or otherwise made available by the Federal Reserve Bank of New York, on the applicable issue date for such Securities, of \$2,000 and any integral multiple of \$1,000 in excess thereof.

SECTION 303. EXECUTION, AUTHENTICATION, DELIVERY AND DATING.

The Securities shall be executed on behalf of the Company by its Chairman of the Board, its Chief Executive Officer, its President, its Chief Financial Officer, its Treasurer or one of its Vice Presidents, under its corporate seal reproduced thereon or affixed thereto attested by its Secretary or one of its Assistant Secretaries. The signature of any of these officers on the Securities may be manual or facsimile. Coupons shall bear the facsimile signature of the Chairman of the Board, President, Treasurer or any Vice President of the Company.

Securities bearing the manual or facsimile signatures of individuals who were at any time the proper officers of the Company shall bind the Company, notwithstanding that such individuals or any of them have ceased to hold such offices prior to the authentication and delivery of such Securities or did not hold such offices at the date of such Securities.

At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities, and the Trustee in accordance with the Company Order shall authenticate and deliver such Securities as in this Indenture provided and not otherwise.

If the form or terms of the Securities of the series have been established in or pursuant to one or more Board Resolutions or Officer's Certificate as permitted by Sections 201 and 301, in authenticating such Securities, and accepting the additional responsibilities under this Indenture in relation to such Securities, the Trustee shall be given (in addition to the other documents required by Section 103 hereof), and (subject to Section 601) shall be fully protected in relying upon, an Opinion of Counsel stating,

- (a) if the form of such Securities has been established by or pursuant to Board Resolution as permitted by Section 201, that such form has been established in conformity with the provisions of this Indenture;
- (b) if the terms of such Securities have been established by or pursuant to Board Resolution as permitted by Section 301, that such terms have been established in conformity with the provisions of this Indenture; and
- (c) that such Securities, when authenticated and delivered by the Trustee and issued by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will constitute legal, valid and binding obligations of the Company, enforceable in accordance with their terms, except as such enforcement is subject to the effect of bankruptcy, insolvency, fraudulent conveyance, reorganization or other laws relating to or affecting creditors' rights, and general principles of equity (regardless of whether such enforcement is considered in a proceeding in equity or at law); *provided* that such Opinion of Counsel need express no opinion as to whether a court in the United States would render a money judgment in currency other than that of the United States.

If such form or terms have been so established, the Trustee shall not be required to authenticate such Securities if the issue of such Securities pursuant to this Indenture will affect the Trustee's own rights, duties or immunities under the Securities and this Indenture or otherwise in a manner not reasonably acceptable to the Trustee.

Each Security shall be dated the date of its authentication.

No Security shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security a certificate of authentication substantially in the form provided for herein executed by the Trustee by manual signature, and such certificate upon any Security shall be conclusive evidence, and the only evidence, that such Security has been duly authenticated and delivered hereunder. Notwithstanding the foregoing, if any Security shall have been authenticated and delivered hereunder but never issued and sold by the Company, and the Company shall deliver such Security to the Trustee for cancellation as provided in Section 309 together with a written statement (which need not comply with Section 103 and need not be accompanied by an Opinion of Counsel) stating that such Security has never been issued and sold by the Company, for all purposes of this Indenture such Security shall be deemed never to have been authenticated and delivered hereunder and shall never be entitled to the benefits of this Indenture.

SECTION 304. TEMPORARY SECURITIES.

Pending the preparation of definitive Securities of any series, the Company may execute, and upon Company Order, the Trustee shall authenticate and deliver, temporary Securities that are printed, lithographed, typewritten, mimeographed or otherwise produced, in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued, in registered form and with such appropriate insertions, omissions, substitutions and other variations as the officers of the Company executing such Securities may determine, as evidenced by their execution of such Securities.

Except in the case of temporary Securities in global form (which shall be exchanged in accordance with the provisions of the following paragraphs), if temporary Securities of any series are issued, the Company will cause definitive Securities of that series to be prepared without unreasonable delay. After the preparation of definitive Securities of such series, the temporary Securities of such series shall be exchangeable for definitive Securities of such series upon surrender of the temporary Securities of such series at the office or agency of the Company in a Place of Payment for that series, without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities of any series, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a like principal amount of definitive Securities of the same series of authorized denominations. Until so exchanged, the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of such series.

All Outstanding temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of the same series and of like tenor authenticated and delivered hereunder.

SECTION 305. REGISTRATION, REGISTRATION OF TRANSFER AND EXCHANGE.

The Company shall cause to be kept for each series of Securities at one of the offices or agencies maintained pursuant to Section 1002 a register (the register maintained in such office and in any other office or agency of the Company in a Place of Payment being herein sometimes collectively referred to as the "Security Register") in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Registered Securities and of transfers of Registered Securities of such series. The Trustee is hereby initially appointed "Security Registrar" for the purpose of registering Securities and transfers of Securities as herein provided.

Upon surrender for registration of transfer of any Registered Security of any series at the office or agency in a Place of Payment for that series, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Registered Securities of the same series and of like tenor, of any authorized denominations and of a like aggregate principal amount.

At the option of the Holder, Registered Securities of any series may be exchanged for other Registered Securities of the same series and of like tenor, of any authorized denominations and of a like aggregate principal amount, upon surrender of the Securities to be exchanged at such office or agency. Whenever any Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Securities that the Holder making the exchange is entitled to receive.

Notwithstanding the foregoing, except as otherwise specified as contemplated by Section 301, any permanent global Security shall be exchangeable only as provided in this paragraph. If the beneficial owners of interests in a permanent global Security are entitled to exchange such interest for Securities of such series and of like tenor and principal amount of another authorized form and denomination, as specified as contemplated by Section 301, then without unnecessary delay but in any event not later than the earliest date on which such interests may be so exchanged, the Company shall deliver to the Trustee definitive Securities of that series in an aggregate principal amount equal to the principal amount of such permanent global Security, executed by the Company. On or after the earliest date on which such interests may be so exchanged, such permanent global Security shall be surrendered from time to time in accordance with instructions given to the Trustee and the Depository (which instructions shall be in writing but need not comply with Section 103 or be accompanied by an Opinion of Counsel) or such other depository as shall be specified in the Company Order with respect thereto to the Trustee, as the Company's agent for such purpose, to be exchanged, in whole or in part, for definitive Securities of the same series without charge and the Trustee shall authenticate and deliver, in exchange for each portion of such permanent global Security, a like aggregate principal amount of other definitive Securities of the same series of authorized denominations and of like tenor as the portion of such permanent global Security to be exchanged; *provided, however*, that no such exchanges may occur during a period beginning at the opening of business 15 days before any selection of Securities of that series is to be redeemed and ending on the relevant Redemption Date. Promptly following any such exchange in part, such permanent global Security marked to evidence the partial exchange shall be returned by the Trustee to the Depository or such other depository referred to above in accordance with the instructions of the Company referred to above. If a Registered Security is issued in exchange for any portion of a permanent global Security after the close of business at the office or agency where such exchange occurs on (i) any Regular Record Date and before the opening of business at such office or agency on the relevant Interest Payment Date, or (ii) any Special Record Date and before the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, interest or Defaulted Interest, as the case may be, will not be payable on such Interest Payment Date or proposed date for payment, as the case may be, in respect of such Registered Security, but will be payable on such Interest Payment Date or proposed date for payment, as the case may be, only to the Person to whom interest in respect of such portion of such permanent global Security is payable in accordance with the provisions of this Indenture.

All Securities issued upon any registration of transfer or exchange of Securities shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Securities surrendered upon such registration of transfer or exchange.

Every Registered Security presented or surrendered for registration of transfer or for exchange shall (if so required by the Company or the Trustee) be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar duly executed, by the Holder thereof or his attorney duly authorized in writing.

No service charge shall be made for any registration of transfer or exchange of Securities, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any registration of transfer or exchange of Securities, other than exchange pursuant to Section 304, 905 or 1107 not involving any transfer.

The Company shall not be required (i) to issue, register the transfer of or exchange Securities of any series during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of Securities of such series selected for redemption and ending at the close of business on the day of the mailing of the relevant notice of redemption or (ii) to register the transfer of or exchange any Registered Security so selected for redemption in whole or in part, except the unredeemed portion of any Security being redeemed in part.

SECTION 306. MUTILATED, DESTROYED, LOST AND STOLEN SECURITIES.

If any mutilated Security is surrendered to the Trustee, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a new Security of the same series and of like tenor and principal amount and bearing a number not contemporaneously Outstanding.

If there shall be delivered to the Company and the Trustee (i) evidence to their satisfaction of the destruction, loss or theft of any Security and (ii) such security or indemnity as may be required by them to save each of them and any agent of either of them harmless, then, in the absence of notice to the Company or the Trustee that such Security has been acquired by a bona fide purchaser, the Company shall execute and upon its request the Trustee shall authenticate and deliver, in lieu of any such destroyed, lost or stolen Security, a new Security of the same series and of like tenor and principal amount and bearing a number not contemporaneously Outstanding.

In case any such mutilated, destroyed, lost or stolen Security has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Security, pay such Security.

Upon the issuance of any new Security under this Section, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fee and expenses of the Trustee) connected therewith.

Every new Security of any series issued pursuant to this Section in lieu of any destroyed, lost or stolen Security shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security shall be at any time enforceable by anyone, and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Securities of that series duly issued hereunder.

The provisions of this Section are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities.

SECTION 307. PAYMENT OF INTEREST; INTEREST RIGHTS PRESERVED.

Interest on any Registered Security which is payable, and is punctually paid or duly provided for, on any Interest Payment Date shall be paid to the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest. Unless otherwise provided with respect to the Securities of any series, payment of interest may be made at the option of the Company by check mailed or delivered to the address of any Person entitled thereto as such address shall appear in the Security Register.

Any interest on any Registered Security of any series which is payable, but is not punctually paid or duly provided for, on any Interest Payment Date (herein called "Defaulted Interest") shall forthwith cease to be payable to the Holder on the relevant Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company, at its election in each case, as provided in clause (1) or (2) below:

(1) The Company may elect to make payment of any Defaulted Interest to the Persons in whose names the Registered Securities of such series (or their respective Predecessor Securities) are registered at the close of business on a Special Record Date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Registered Security of such series and the date of the proposed payment, and at the same time the Company shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this Clause provided. Thereupon the Trustee shall fix a Special Record Date for the payment of such Defaulted Interest which shall be not more than 15 days and not less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Trustee shall promptly notify the Company of such Special Record Date and, in the name and at the expense of the Company, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first-class postage prepaid, to each Holder of Registered Securities of such series at his address as it appears in the Security Register, not less than 10 days prior to such Special Record Date. The Trustee may, in its discretion, in the name and at the expense of the Company, cause a similar notice to be published at least once in an Authorized Newspaper, but such publication shall not be a condition precedent to the establishment of such Special Record Date. Notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor having been so mailed, such Defaulted Interest shall be paid to the Persons in whose names the Registered Securities of such series (or their respective Predecessor Securities) are registered at the close of business on such Special Record Date and shall no longer be payable pursuant to the following clause (2).

(2) The Company may make payment of any Defaulted Interest on the Registered Securities of any series in any other lawful manner not inconsistent with the requirements of any securities exchange on which such Securities may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this Clause, such manner of payment shall be deemed practicable by the Trustee.

Subject to the foregoing provisions of this Section, each Security delivered under this Indenture, upon registration of transfer of, in exchange for or in lieu of, any other Security, shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Security.

SECTION 308. PERSONS DEEMED OWNERS.

Prior to due presentment of a Registered Security for registration of transfer, the Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name such Registered Security is registered as the owner of such Registered Security for the purpose of receiving payment of principal of (and premium, if any) and (subject to Sections 305 and 307) interest on such Registered Security and for all other purposes whatsoever, whether or not such Security be overdue, and neither the Company, the Trustee nor any agent of the Company or the Trustee shall be affected by notice to the contrary.

SECTION 309. CANCELLATION.

All Securities surrendered for payment, redemption, registration of transfer or exchange or for credit against any sinking fund payment shall, if surrendered to any Person other than the Trustee, be delivered to the Trustee. All Registered Securities so delivered shall be promptly cancelled by the Trustee. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder which the Company may have acquired in any manner whatsoever, and all Securities so delivered shall be promptly cancelled by the Trustee. No Securities shall be authenticated in lieu of or in exchange for any Securities cancelled as provided in this Section, except as expressly permitted by this Indenture. All cancelled Securities held by the Trustee shall be disposed of in its customary manner.

SECTION 310. COMPUTATION OF INTEREST.

Except as otherwise specified as contemplated by Section 301 for Securities of any series, interest on the Securities of each series shall be computed on the basis of a year comprising twelve 30-day months.

SECTION 311. CUSIP NUMBERS.

The Company, in issuing the Securities, may use "CUSIP" numbers (if then generally in use), and, if so, the Trustee shall use "CUSIP" numbers in notices of redemption as a convenience to Holders; *provided* that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Securities or as contained in any notice of a redemption and that reliance may be placed only on the other identification numbers printed on the Securities, and any such redemption shall not be affected by any defect in or omission of such numbers.

ARTICLE IV

**SATISFACTION AND DISCHARGE; LEGAL DEFEASANCE AND
COVENANT DEFEASANCE**

SECTION 401. SATISFACTION AND DISCHARGE OF INDENTURE.

This Indenture shall upon Company Request cease to be of further effect with respect to Securities of any series (except as to any surviving rights of registration of transfer, exchange or replacement of such series of Securities herein expressly provided for), and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging satisfaction and discharge of this Indenture with respect to such Securities, when

(1) either

(A) all such Securities of such series theretofore authenticated and delivered (other than (i) such Securities which have been destroyed, lost or stolen and which have been replaced or paid as provided in Section 306 and (ii) such Securities of such series for whose payment money has theretofore been deposited in trust or segregated and held in trust by the Company and thereafter repaid to the Company or discharged from such trust, as provided in Section 1003) have been delivered to the Trustee for cancellation; or

(B) all such Securities of such series not theretofore delivered to the Trustee for cancellation

(i) have become due and payable, or

(ii) will become due and payable at their Stated Maturity within one year, or

(iii) are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name of the Company, at the expense, of the Company,

and the Company, in the case of (B)(i), (ii) or (iii) above, has deposited or caused to be deposited with the Trustee, as funds in trust for such purpose, an amount in the currency or currencies or currency unit or units in which such Securities of such series are payable or U.S. Government Obligations maturing as to principal and interest in such amounts and at such times as will, together with any interest thereon, be sufficient to pay and discharge the entire indebtedness on such Securities of such series not theretofore delivered to the Trustee for cancellation, for principal and any premium and interest to the date of such deposit (in the case of Securities which have become due and payable) or to the Stated Maturity or Redemption Date, as the case may be;

(2) the Company has paid or caused to be paid all other sums payable hereunder by the Company; and

(3) the Company has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture with respect to such series of Securities have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture with respect to the Outstanding Securities of such series pursuant to this Section 401, the obligations of the Company to the Trustee under Section 607 and to any Authenticating Agent under Section 614 and, if money or U.S. Government Obligations shall have been deposited with the Trustee pursuant to subclause (B) of Clause (1) of this Section, the obligations of the Trustee under Section 406, Article VI and the last paragraph of Section 1003 shall survive such satisfaction and discharge.

SECTION 402. OPTION TO EFFECT LEGAL DEFEASANCE OR COVENANT DEFEASANCE.

In addition to the Company's rights under Section 401 (which shall not be affected by this Section 402), the Company may, at the option of its Board of Directors evidenced by a resolution set forth in an Officers' Certificate, at any time, elect to have either Section 403 or 404 hereof applied to all Outstanding Securities of any series upon compliance with the conditions set forth in Sections 403 through 406 hereof.

SECTION 403. LEGAL DEFEASANCE AND DISCHARGE.

Upon the Company's exercise under Section 402 hereof of the option applicable to this Section 403, the Company and the Guarantors shall, subject to the satisfaction of the conditions set forth in Section 405 hereof, be deemed to have been discharged from their obligations with respect to all Outstanding Securities of a series on the date the conditions set forth below are satisfied (hereinafter, "Legal Defeasance"). For this purpose, Legal Defeasance means that the Company shall be deemed to have paid and discharged the entire Indebtedness represented by the Outstanding Securities of a series, which shall thereafter be deemed to be "outstanding" only for the purposes of Section 406 hereof and the other Sections of this Indenture referred to in (a) and (b) below, and to have satisfied all its other obligations under such Securities and this Indenture (and the Trustee, on demand of and at the expense of the Company, shall execute proper instruments acknowledging the same), except for the following provisions which shall survive until otherwise terminated or discharged hereunder: (a) the rights of Holders of Outstanding Securities of any series to receive payments in respect of the principal of, premium, if any, and interest, if any, on such Securities when such payments are due from the trust referred to in Section 405, (b) the Company's obligations with respect to such Securities under Sections 304, 305, 306 and 1002 of this Indenture, (c) the rights, powers, trusts, duties and immunities of the Trustee hereunder and the Company's obligations in connection therewith and (d) this Article IV. Subject to compliance with Sections 402 through 406 hereof, the Company may exercise its option under this Section 403 notwithstanding the prior exercise of its option under Section 404 hereof.

SECTION 404. COVENANT DEFEASANCE.

Upon the Company's exercise under Section 402 hereof of the option applicable to this Section 404, the Company shall, subject to the satisfaction of the conditions set forth in Section 405 hereof, be released from the operation of Section 801 hereof with respect to the Outstanding Securities of a series and any other covenant contained in the Board Resolution or supplemental indenture relating to such series on and after the date the conditions set forth in Section 405 are satisfied (hereinafter, "Covenant Defeasance"), and the Securities of such series shall thereafter be deemed not "outstanding" for the purposes of any direction, waiver, consent or declaration or act of Holders (and the consequences of any thereof) in connection with such covenants, but shall continue to be deemed "outstanding" for all other purposes hereunder (it being understood that such Securities shall not be deemed outstanding for accounting purposes). For this purpose, Covenant Defeasance means that, with respect to the Outstanding Securities of such series, the Company may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such covenant or by reason of any reference in any such covenant to any other provision herein or in any other document and such omission to comply shall not constitute a Default or an Event of Default under Section 501 hereof, but, except as specified above, the remainder of this Indenture and such series of Securities shall be unaffected thereby. In addition, upon the Company's exercise under Section 402 hereof of the option applicable to this Section 404 hereof, subject to the satisfaction of the conditions set forth in Section 405 hereof, Sections 501(3) through 501(6) and Section 501(9) hereof shall not constitute Events of Default.

SECTION 405. CONDITIONS TO LEGAL OR COVENANT DEFEASANCE.

The following shall be the conditions to the application of either Section 403 or 404 hereof to the Outstanding Securities of any series:

In order to exercise either Legal Defeasance or Covenant Defeasance:

- (a) the Company must irrevocably deposit with the Trustee, in trust, for the benefit of the Holders of the Securities, cash in United States dollars, U.S. Government Obligations or a combination thereof, in such amounts as will be sufficient, to pay the principal of, or interest and premium, if any, on the Outstanding Securities of such series on the Stated Maturity or on the applicable redemption date, as the case may be, and the Company must specify whether the Securities are being defeased to maturity or to a particular redemption date;
- (b) in the case of Legal Defeasance, the Company shall have delivered to the Trustee an Opinion of Counsel reasonably acceptable to the Trustee confirming that (i) the Company has received from, or there has been published by, the Internal Revenue Service a ruling or (ii) since the date of this Indenture, there has been a change in the applicable federal income tax law, in either case to the effect that, and based thereon such Opinion of Counsel shall confirm that, the Holders of the Outstanding Securities of such series will not recognize income, gain or loss for federal income tax purposes as a result of such Legal Defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Legal Defeasance had not occurred;
- (c) in the case of Covenant Defeasance, the Company shall have delivered to the Trustee an Opinion of Counsel reasonably acceptable to the Trustee confirming that the Holders of the Outstanding Securities of such series will not recognize income, gain or loss for federal income tax purposes as a result of such Covenant Defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred;

(d) no Default or Event of Default shall have occurred and be continuing either: (i) on the date of such deposit (other than a Default or Event of Default resulting from the borrowing of funds to be applied to such deposit); or (ii) insofar as Events of Default from bankruptcy or insolvency events are concerned, at any time in the period ending on the 91st day after the date of deposit;

(e) such Legal Defeasance or Covenant Defeasance will not result in a breach or violation of, or constitute a default under any material agreement or instrument (other than the Indenture) to which the Company is a party or by which the Company is bound;

(f) the Company must have delivered to the Trustee an Opinion of Counsel to the effect that, assuming no intervening bankruptcy of the Company or any Guarantor between the date of deposit and the 91st day following the deposit and assuming that no Holder is an "insider" of the Company under applicable bankruptcy law, after the 91st day following the deposit, the trust funds will not be subject to the effect of any applicable bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally;

(g) the Company must deliver to the Trustee an Officers' Certificate stating that the deposit was not made by the Company with the intent of preferring the Holders of Securities over the other creditors of the Company with the intent of defeating, hindering, delaying or defrauding creditors of the Company or others; and

(h) the Company must deliver to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent relating to the Legal Defeasance or the Covenant Defeasance have been complied with.

SECTION 406. DEPOSITED MONEY AND U.S. GOVERNMENT OBLIGATIONS TO BE HELD IN TRUST; OTHER MISCELLANEOUS PROVISIONS.

Subject to Section 407 hereof, all money and non-callable U.S. Government Obligations (including the proceeds thereof) deposited with the Trustee (or other qualifying trustee, collectively for purposes of this Section 406, the "Trustee") pursuant to Section 401 or 404 hereof in respect of the Outstanding Securities of any series shall be held in trust and applied by the Trustee, in accordance with the provisions of such Securities and this Indenture, to the payment, either directly or through any paying agent (including the Company acting as paying agent) as the Trustee may determine, to the Holders of such Securities of all sums due and to become due thereon in respect of principal, premium on, if any, and interest, but such money need not be segregated from other funds except to the extent required by law.

The Company shall pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the cash or non-callable U.S. Government Obligations deposited pursuant to Section 401 or 404 hereof or the principal and interest received in respect thereof other than any such tax, fee or other charge which by law is for the account of the Holders of the Outstanding Securities.

Anything in this Article IV to the contrary notwithstanding, the Trustee shall deliver or pay to the Company from time to time upon the written request of the Company any money or non-callable U.S. Government Obligations held by it as provided in Section 401 or 404 hereof which, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, are in excess of the amount thereof that would then be required to be deposited to effect an equivalent Legal Defeasance or Covenant Defeasance or satisfaction and discharge of this Indenture.

SECTION 407. REPAYMENT TO COMPANY.

Any money deposited with the Trustee or any paying agent, or then held by the Company, in trust for the payment of the principal of, premium on, if any, or interest on any Securities and remaining unclaimed for two years after such principal, and premium, if any, or interest has become due and payable shall be paid to the Company on its written request or (if then held by the Company) shall be discharged from such trust; and the Holder of such Securities shall thereafter, as an unsecured creditor, look only to the Company for payment thereof, and all liability of the Trustee or such paying agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease; *provided, however*, that the Trustee or such paying agent, before being required to make any such repayment, may at the expense of the Company cause to be published once, in the New York Times and The Wall Street Journal (national edition), notice that such money remains unclaimed and that, after a date specified therein, which shall not be less than 30 days from the date of such notification or publication, any unclaimed balance of such money then remaining will be repaid to the Company.

SECTION 408. REINSTATEMENT.

If the Trustee or Paying Agent is unable to apply any money or U.S. Government Obligations deposited with respect to Securities of any series in accordance with Section 401, 403 or 404 hereof, as the case may be, by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, then the Company's obligations under this Indenture with respect to the Securities of such series and the Securities of such series shall be revived and reinstated as though no deposit had occurred pursuant to Section 401, 403 or 404 hereof until such time as the Trustee or Paying Agent is permitted to apply all such money or U.S. Government Obligations in accordance with Section 401, 403 or 404 hereof, as the case may be; *provided, however*, that, if the Company makes any payment of principal of, premium on, if any, or interest on any Securities following the reinstatement of its obligations, the Company shall be subrogated to the rights of the Holders of such Securities to receive such payment from the money or U.S. Government Obligations held by the Trustee or Paying Agent.

ARTICLE V

REMEDIES

SECTION 501. EVENTS OF DEFAULT.

An "Event of Default" on a series occurs if:

- (1) the Company defaults in the payment of interest on any Security of such series when the same becomes due and payable and the Default continues for a period of 30 days;
- (2) the Company defaults in the payment of the principal of any Security of such series when the same becomes due and payable at maturity, upon redemption or otherwise;
- (3) the Company fails to comply with any of its other agreements in the Securities of such series or this Indenture (as they relate thereto) and the Default continues for the period specified below and after the notice specified below (except in the case of a default with respect to any Change of Control Provisions or Article VIII (or any replacement provisions contemplated by Article VIII), which will constitute Events of Default with notice but without passage of time);

(4) the acceleration of any Indebtedness of the Company in an amount of \$50 million or more, individually or in the aggregate, and such acceleration does not cease to exist if such Indebtedness is not satisfied, in either case within five days after such acceleration;

(5) the failure by the Company to make any principal or interest payment in an amount of \$50 million or more, individually or in the aggregate, in respect of Indebtedness of the Company within five days of such principal or interest becoming due and payable (after giving effect to any applicable grace period set forth in the documents governing such Indebtedness);

(6) a final judgment or judgments in an amount of \$50 million or more, individually or in the aggregate, for the payment of money having been entered by a court or courts of competent jurisdiction against the Company and such judgment or judgments is not satisfied, stayed, annulled or rescinded within 90 days after being entered;

(7) the Company pursuant to or within the meaning of any Bankruptcy Law:

- (a) commences a voluntary case,
- (b) consents to the entry of an order for relief against it in an involuntary case,
- (c) consents to the appointment of a Custodian of it or for all or substantially all of its property, or
- (d) makes a general assignment for the benefit of creditors;

(8) a court of competent jurisdiction enters into an order or decree under any Bankruptcy Law that:

- (a) is for relief against the Company in an involuntary case,
- (b) appoints a Custodian of the Company or for all or substantially all of its property, or
- (c) orders the liquidation of the Company,

and the order or decree remains unstayed and in effect for 60 days; or

(9) any other Event of Default occurs with respect to Securities of that series as provided in the supplemental indenture or Board Resolutions establishing such series of Securities.

The term "Bankruptcy Law" means the Bankruptcy Act or any similar Federal or State law for the relief of debtors. The term "Custodian" means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

A Default under clause (3) above is not an Event of Default until the Trustee notifies the Company, or the Holders of at least 25% in principal amount of the Securities of the applicable series notify the Company and the Trustee of the Default and (except in the case of a default with respect to any provisions of any supplemental indenture or Board Resolution establishing such series of Securities giving the Holders of Securities of such series the right to require the Company to repurchase or redeem such Securities of such series upon the occurrence of a change of control prior to the final maturity date of such Securities of such series ("Change of Control Provisions") or Article VIII (or any replacement provisions contemplated by Article VIII)) the Company does not cure the Default within 90 days after receipt of the notice. The notice must specify the Default, demand that it be remedied and state that the notice is a "Notice of Default."

SECTION 502. ACCELERATION.

If any Event of Default (other than an Event of Default specified in clause (7) or (8) of Section 501 hereof) with respect to Securities of any series occurs and is continuing, either the Trustee or the Holders of at least 25% in principal amount of the then Outstanding Securities of that series may declare all the Securities of that series to be due and payable immediately. Upon any such declaration, the Securities of that series shall become due and payable immediately, by a notice in writing to the Company (and to the Trustee if given by Holders). Notwithstanding the foregoing, if an Event of Default specified in clause (7) or (8) of Section 501 hereof occurs with respect to any series of Securities, all outstanding Securities of that series shall become due and payable without further action or notice. The Holders of a majority in aggregate principal amount of Securities of any series then Outstanding by notice to the Trustee may on behalf of the Holders of all of the Securities of that series waive any existing Default or Event of Default and its consequences under this Indenture except a continuing Default or Event of Default in the payment of interest or premium, if any, on, or the principal of, the Securities of that series.

SECTION 503. OTHER REMEDIES.

If an Event of Default with respect to Securities of any series occurs and is continuing, the Trustee may pursue any available remedy to collect the payment of principal, premium, if any, and interest on the Securities of that series or to enforce the performance of any provision of the Securities of that series or this Indenture.

The Trustee may maintain a proceeding even if it does not possess any of the Securities in a series or does not produce any of them in the proceeding. A delay or omission by the Trustee or any Holder of a Security in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of or acquiescence in the Event of Default. All remedies are cumulative to the extent permitted by law.

SECTION 504. WAIVER OF PAST DEFAULTS.

Holders of not less than a majority in aggregate principal amount of the then outstanding Securities in any series by notice to the Trustee may on behalf of the Holders of all of the Securities of that series waive any existing Default or Event of Default and its consequences hereunder, except a continuing Default or Event of Default in the payment of the principal of, premium, if any, or interest on, the Securities of that series (including in connection with an offer to purchase) (*provided, however*, that the Holders of a majority in aggregate principal amount of the then outstanding Securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from such acceleration, with respect to that series). Upon any such waiver, such Default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other Default or impair any right consequent thereon.

SECTION 505. CONTROL BY MAJORITY.

With respect to any series of Securities, Holders of a majority in principal amount of the then outstanding Securities of that series may direct the time, method and place of conducting any proceeding for exercising any remedy available to the Trustee or exercising any trust or power conferred on it. However, the Trustee may refuse to follow any direction that conflicts with law or this Indenture that the Trustee determines may be unduly prejudicial to the rights of other Holders of Securities of any series or that may involve the Trustee in personal liability.

SECTION 506. LIMITATION ON SUITS.

A Holder of a Security of any series may pursue a remedy with respect to this Indenture or the Securities of that series only if:

- (a) the Holder of a Security of that series gives to the Trustee written notice of a continuing Event of Default;
- (b) the Holders of at least 25% in principal amount of the then outstanding Securities of that series make a written request to the Trustee to pursue the remedy;
- (c) such Holder of a Security or Holders of Securities offer and, if requested, provide to the Trustee indemnity satisfactory to the Trustee against any loss, liability or expense;
- (d) the Trustee does not comply with the request within 60 days after receipt of the request and the offer and, if requested, the provision of indemnity; and
- (e) during such 60-day period the Holders of a majority in principal amount of the then outstanding Securities of that series do not give the Trustee a direction inconsistent with the request.

A Holder of a Security may not use this Indenture to prejudice the rights of another Holder of a Security or to obtain a preference or priority over another Holder of a Security.

SECTION 507. RIGHTS OF HOLDERS OF SECURITIES TO RECEIVE PAYMENT.

Notwithstanding any other provision of this Indenture, the right of any Holder of a Security of any series to receive payment of principal, premium, if any, and interest on the Security, on or after the respective due dates expressed in the Security (including in connection with an offer to purchase), or to bring suit for the enforcement of any such payment on or after such respective dates, shall not be impaired or affected without the consent of such Holder.

SECTION 508. COLLECTION SUIT BY TRUSTEE.

With respect to the Securities of any series, if an Event of Default specified in clause (1) or (2) of Section 501 hereof occurs and is continuing, the Trustee is authorized to recover judgment in its own name and as trustee of an express trust against the Company for the whole amount of principal of, premium on, if any, and interest remaining unpaid on the Securities of that series and interest on overdue principal and, to the extent lawful, interest and such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

SECTION 509. TRUSTEE MAY FILE PROOFS OF CLAIM.

The Trustee is authorized to file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and the Holders of the Securities of any series allowed in any judicial proceedings relative to the Company (or any other obligor upon the Securities), its creditors or its property and shall be entitled and empowered to collect, receive and distribute any money or other property payable or deliverable on any such claims and any custodian in any such judicial proceeding is hereby authorized by each Holder of that series to make such payments to the Trustee, and in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 607 of this Indenture. To the extent that the payment of any such compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 607 of this Indenture out of the estate in any such proceeding, shall be denied for any reason, payment of the same shall be secured by a Lien on, and shall be paid out of, any and all distributions, dividends, money, securities and other properties that the Holders may be entitled to receive in such proceeding whether in liquidation or under any plan of reorganization or arrangement or otherwise. Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder of any series of Securities any plan of reorganization, arrangement, adjustment or composition affecting the Securities of that series or the rights of any Holder, or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

SECTION 510. PRIORITIES.

If the Trustee collects any money pursuant to this Article, it shall pay out the money in the following order:

- (a) First: to the Trustee, its agents and attorneys for amounts due under Section 607 of this Indenture, including payment of all compensation, expense and liabilities incurred and all advances made, by the Trustee and the costs and expenses of collection;
- (b) Second: to Holders of Securities for amounts due and unpaid on the Securities for principal, premium, if any, and interest, ratably, without preference or priority of any according to the amounts due and payable on the Securities for principal, premium, if any, and interest, respectively; and
- (c) Third: to the Company or to such party as a court of competent jurisdiction shall direct.

The Trustee may fix a record date and payment date for any payment to Holders of Securities pursuant to this Section 510.

SECTION 511. UNDERTAKING FOR COSTS.

In any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by it as a Trustee, a court in its discretion may require the filing by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section does not apply to a suit by the Trustee, a suit by a Holder of a Security pursuant to Section 507 hereof, or a suit by Holders of more than 10% in principal amount of the then outstanding Securities of any series.

ARTICLE VI

THE TRUSTEE

SECTION 601. CERTAIN DUTIES AND RESPONSIBILITIES.

- (a) Except during the continuance of an Event of Default with respect to the Securities of any series:
- (1) the Trustee undertakes to perform such duties and only such duties as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read in this Indenture against the Trustee; and
 - (2) in the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions that by any provision hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether they conform to the requirements of this Indenture (but need not confirm or investigate the accuracy of mathematical calculation or other facts stated therein).
- (b) In case an Event of Default has occurred and is continuing with respect to the Securities of any series, the Trustee shall exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise, as a prudent person would exercise or use under the circumstances in the conduct of his or her own affairs.
- (c) No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that:
- (1) this Subsection shall not be construed to limit the effect of Subsection (a) of this Section;
 - (2) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;
 - (3) the Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with the direction of the Holders of a majority in principal amount of the Outstanding Securities of any series or of all series, determined as provided in Section 505, relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture with respect to the Securities of such series; and
 - (4) no provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers, if it shall have reasonable grounds for believing that repayment of such funds or indemnity satisfactory to it against such risk or liability is not assured to it.

(d) Whether or not therein expressly so provided, every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Section.

SECTION 602. NOTICE OF DEFAULTS.

Within 90 days after the occurrence of any Default or Event of Default with respect to the Securities of any series, the Trustee shall give notice of such Default or Event of Default known to the Trustee to all Holders of Securities of such series in the manner provided in Section 107 and in compliance with the Trust Indenture Act, unless such Default or Event of Default shall have been cured or waived; *provided, however*, that, except in the case of a Default or Event of Default in the payment of the principal of (or premium, if any) or interest on or any Additional Amounts with respect to any Security of such series or in the payment of any sinking fund installment with respect to Securities of such series, the Trustee shall be protected in withholding such notice if and so long as the board of directors, the executive committee or a trust committee of directors and/or Responsible Officers of the Trustee in good faith determines that the withholding of such notice is in the interest of the Holders of Securities of such series; and *provided, further*, that in the case of any Default or Event of Default of the character specified in Section 501(3) with respect to Securities of such series, no such notice to Holders shall be given until at least 30 days after the occurrence thereof.

SECTION 603. CERTAIN RIGHTS OF TRUSTEE.

Subject to the provisions of Section 601:

(a) the Trustee may conclusively rely and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, coupon, other evidence of indebtedness or other paper or document believed by it to be genuine and to have been signed or presented by the proper party or parties;

(b) any request or direction of the Company mentioned herein shall be sufficiently evidenced by a Company Request or Company Order and any resolution of the Board of Directors may be sufficiently evidenced by a Board Resolution;

(c) whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee (unless other evidence be herein specifically prescribed) may, in the absence of bad faith on its part, rely upon an Officers' Certificate;

(d) the Trustee may consult with counsel of its selection and the advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;

(e) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders pursuant to Indenture, unless such Holders shall have offered to the Trustee security or indemnity satisfactory to it against the costs, expenses and liabilities that might be incurred by it in compliance with such request or direction;

(f) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, coupon, other evidence of indebtedness or other paper or document, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Company, personally or by agent or attorney at the sole cost of the Company and shall incur no liability or additional liability of any kind by reason of such inquiry or investigation;

(g) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and, except for any Affiliates of the Trustee, the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder;

(h) the Trustee shall not be charged with knowledge of any Default or Event of Default with respect to the Securities of any series for which it is acting as Trustee unless either (1) a Responsible Officer shall have actual knowledge of such Default or Event of Default or (2) written notice of such Default or Event of Default which is in fact such a default shall have been received by the Trustee at the Corporate Trust Office of the Trustee and such notice references the Securities and this Indenture by the Company or any other obligor on such Securities or by any Holder of such Securities;

(i) the Trustee shall not be liable for any action taken, suffered or omitted by it in good faith and believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture.

(j) in no event shall the Trustee be responsible or liable for special, indirect, or consequential loss or damage of any kind whatsoever (including, but not limited to, loss of profit) irrespective of whether the Trustee has been advised of the likelihood of such loss or damage and regardless of the form of action;

(k) the rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder, and each agent, custodian and other Person employed to act hereunder; and

(l) the Trustee may request that the Company deliver a certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified action pursuant to this Indenture.

SECTION 604. NOT RESPONSIBLE FOR RECITALS OR ISSUANCE OF SECURITIES.

The recitals contained herein and in the Securities, except the Trustee's certificates of authentication, shall be taken as the statements of the Company, and the Trustee assumes no responsibility for their correctness. The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Securities. The Trustee shall not be accountable for the use or application by the Company of Securities or the proceeds thereof.

SECTION 605. MAY HOLD SECURITIES.

The Trustee, any Authenticating Agent, any Paying Agent, any Security Registrar or any other agent of the Company, in its individual or any other capacity, may become the owner or pledgee of Securities and, subject to Sections 608 and 613, may otherwise deal with the Company with the same rights it would have if it were not the Trustee, Authenticating Agent, Paying Agent, Security Registrar or such other agent.

SECTION 606. MONEY HELD IN TRUST.

Money held by the Trustee in trust hereunder need not be segregated from other funds except to the extent required by law. The Trustee shall be under no liability for interest on any money received by it hereunder except as otherwise agreed with the Company.

SECTION 607. COMPENSATION AND REIMBURSEMENT.

The Company agrees:

- (1) to pay to the Trustee from time to time compensation for all services rendered by it hereunder (which compensation shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust);
- (2) except as otherwise expressly provided herein, to reimburse the Trustee upon its request for all reasonable expenses, disbursements and advances incurred or made by the Trustee in accordance with any provision of this Indenture (including the compensation and the reasonable expenses and disbursements of its agents and counsel), except any such expense, disbursement or advance as shall be determined to have been caused by its own negligence or willful misconduct; and
- (3) to indemnify the Trustee and each of its directors, officers, employees, agents and/or representatives for, and to hold each of them harmless against, any loss, liability or expense incurred without negligence or willful misconduct on each of their part, arising out of or in connection with the acceptance or administration of the trust or trusts hereunder, including the costs and expenses of defending themselves against any claim or liability in connection with the exercise or performance of any of the Trustee's powers or duties hereunder.

As security for the performance of the obligations of the Company under this Section 607, the Trustee shall have a lien prior to the Securities on all property and funds held or collected by the Trustee as such, except funds held in trust for the payment of principal of, premium, if any, or interest, if any, on any Additional Amounts with respect to particular Securities.

Any expenses and compensation for any services rendered by the Trustee after the occurrence of an Event of Default (including the reasonable charges and expenses of its counsel) specified in clause (7) or (8) of Section 501 shall constitute expenses and compensation for services of administration under all applicable federal or state bankruptcy, insolvency, reorganization or other similar laws.

The provisions of this Section 607 and any lien arising hereunder shall survive the resignation or removal of the Trustee or the discharge of the Company's obligations under this Indenture and the termination of this Indenture.

SECTION 608. DISQUALIFICATION; CONFLICTING INTERESTS.

(a) If the Trustee has or shall acquire any conflicting interest, as defined in this Section 608, with respect to the Securities of any series, it shall, within 90 days after ascertaining that it has such conflicting interest, either eliminate such conflicting interest or resign with respect to the Securities of that series in the manner and with the effect hereinafter specified in this Article.

(b) In the event that the Trustee shall fail to comply with the provisions of Subsection (a) of this Section 608 with respect to the Securities of any series, the Trustee shall, within 10 days after the expiration of such 90-day period, transmit by mail to all Holders of Securities of that series, as their names and addresses appear in the Security Register, notice of such failure in compliance with the Trust Indenture Act.

(c) For the purposes of this Section, the term "conflicting interest" shall have the meaning specified in Section 310(b) of the Trust Indenture Act and the Trustee shall comply with Section 310(b) of the Trust Indenture Act; *provided*, that there shall be excluded from the operation of Section 310(b)(1) of the Trust Indenture Act with respect to the Securities of any series any indenture or indentures under which other securities, or certificates of interest or participation in other securities, of the Company are outstanding, if the requirements for such exclusion set forth in Section 310(b)(1) of the Trust Indenture Act are met. For purposes of the preceding sentence, the optional provision permitted by the second sentence of Section 310(b)(1) of the Trust Indenture Act shall be applicable.

SECTION 609. CORPORATE TRUSTEE REQUIRED; ELIGIBILITY.

There shall at all times be a Trustee hereunder which shall be a corporation organized and doing business under the laws of the United States of America, any State thereof or the District of Columbia, authorized under such laws to exercise corporate trust powers, having a combined capital and surplus of at least \$50 million and subject to supervision or examination by Federal or State (or the District of Columbia) authority. If such corporation publishes reports of condition at least annually, pursuant to law or to the requirements of said supervising or examining authority, then for the purposes of this Section 609, the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time the Trustee shall cease to be eligible in accordance with the provisions of this Section, it shall resign immediately in the manner and with the effect hereinafter specified in this Article.

The Indenture shall always have a Trustee who satisfies the requirements of Sections 310(a)(1), 310(a)(2) and 310(a)(5) of the Trust Indenture Act.

SECTION 610. RESIGNATION AND REMOVAL; APPOINTMENT OF SUCCESSOR.

(a) No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to this Article shall become effective until the acceptance of appointment by the successor Trustee in accordance with the applicable requirements of Section 611.

(b) The Trustee may resign at any time with respect to the Securities of one or more series by giving written notice thereof to the Company. If the instrument of acceptance by a successor Trustee required by Section 611 shall not have been delivered to the resigning Trustee within 30 days after the giving of such notice of resignation, the resigning Trustee may petition at the expense of the Company any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

(c) The Trustee may be removed at any time with respect to the Securities of any series by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series, delivered to the Trustee and to the Company. If the instrument of acceptance by a successor Trustee required by Section 611 shall not have been delivered to the resigning Trustee within 30 days after the giving of such notice of resignation, the resigning Trustee may petition at the expense of the Company any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

(d) If at any time:

(1) the Trustee shall fail to comply with Section 608(a) after written request therefor by the Company or by any Holder who has been a bona fide Holder of a Security for at least six months, or

(2) the Trustee shall cease to be eligible under Section 609 and shall fail to resign after written request therefor by the Company or by any such Holder of Securities, or

(3) the Trustee shall become incapable of acting or shall be adjudged a bankrupt or insolvent or a receiver of the Trustee or of its property shall be appointed or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation,

then, in any such case, (i) the Company by a Board Resolution may remove the Trustee with respect to all Securities, or (ii) subject to Section 505, any Holder who has been a bona fide Holder of a Security for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee with respect to all Securities and the appointment of a successor Trustee or Trustees.

(e) If the Trustee shall resign, be removed or become incapable of acting, or if a vacancy shall occur in the office of Trustee for any cause, with respect to the Securities of one or more series, the Company, by a Board Resolution, shall promptly appoint a successor Trustee or Trustees with respect to the Securities of that or those series (it being understood that any such successor Trustee may be appointed with respect to the Securities of one or more or all of such series and that at any time there shall be only one Trustee with respect to the Securities of any particular series) and such successor Trustee or Trustees shall comply with the applicable requirements of Section 611. If no successor Trustee with respect to the Securities of any series shall have been so appointed by the Company and accepted appointment in the manner required by Section 611, any Holder who has been a bona fide Holder of a Security of such series for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

(f) The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series by mailing written notice of such event by first-class mail, postage prepaid, to all Holders of Securities of such series as their names and addresses appear in the Security Register. Each notice shall include the name of the successor Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

SECTION 611. ACCEPTANCE OF APPOINTMENT BY SUCCESSOR.

(a) In case of the appointment hereunder of a successor Trustee with respect to all Securities, every such successor Trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on the request of the Company or the successor Trustee, such retiring Trustee shall, upon payment of its charges, execute and deliver an instrument transferring to such successor Trustee all the rights, powers and trusts of the retiring Trustee and shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder.

(b) In case of the appointment hereunder of a successor Trustee with respect to the Securities of one or more (but not all) series, the Company, the retiring Trustee and each successor Trustee with respect to the Securities of one or more series shall execute and deliver an indenture supplemental hereto wherein each successor Trustee shall accept such appointment and which (1) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor Trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates, (2) if the retiring Trustee is not retiring with respect to all Securities, shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee and (3) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust and that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or trusts hereunder administered by any other such Trustee; and upon the execution and delivery of such supplemental indenture, the resignation or removal of the retiring Trustee shall become effective to the extent provided therein and each such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates; but, on request of the Company or any successor Trustee, such retiring Trustee shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor Trustee relates.

(c) Upon request of any such successor Trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor Trustee such rights, powers and trusts referred to in paragraph (a) or (b) of this Section, as the case may be.

(d) No successor Trustee shall accept its appointment unless at the time of such acceptance such successor Trustee shall be qualified and eligible under this Article.

SECTION 612. MERGER, CONVERSION, CONSOLIDATION OR SUCCESSION TO BUSINESS.

Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to all or substantially all the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder, provided such corporation shall be otherwise qualified and eligible under this Article, without the execution or filing of any paper or any further act on the part of any of the parties hereto; *provided, however*, that in the case of a corporation succeeding to all or substantially all the corporate trust business of the Trustee, such successor corporation shall expressly assume all of the Trustee's liabilities hereunder. In case any Securities shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Securities so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities.

SECTION 613. PREFERENTIAL COLLECTION OF CLAIMS AGAINST COMPANY.

The Trustee shall comply with Section 311(a) of the Trust Indenture Act, excluding any creditor relationship described in Section 311(b) of the Trust Indenture Act. A Trustee who has resigned or been removed shall be subject to Section 311(a) of the Trust Indenture Act to the extent indicated therein.

SECTION 614. APPOINTMENT OF AUTHENTICATING AGENT.

The Trustee may appoint an Authenticating Agent or Agents that shall be authorized to act on behalf of the Trustee to authenticate Securities issued upon original issue and upon exchange, registration of transfer or partial redemption or pursuant to Section 306, and Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. Wherever reference is made in this Indenture to the authentication and delivery of Securities by the Trustee or the Trustee's certificate of authentication, such reference shall be deemed to include authentication and delivery on behalf of the Trustee by an Authenticating Agent and a certificate of authentication executed on behalf of the Trustee by an Authenticating Agent. Each Authenticating Agent shall be acceptable to the Company and shall at all times be a corporation organized and doing business under the laws of the United States of America, any State thereof or the District of Columbia having a combined capital and surplus of not less than \$50 million or equivalent amount expressed in a foreign currency and subject to supervision or examination by Federal or State (or the District of Columbia) authority or authority of such country. If such Authenticating Agent publishes reports of condition at least annually, pursuant to law or to the requirements of said supervising or examining authority, then for the purposes of this Section 614, the combined capital and surplus of such Authenticating Agent shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time an Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section 614, such Authenticating Agent shall resign immediately in the manner and with the effect specified in this Section 614.

Any corporation into which an Authenticating Agent may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which such Authenticating Agent shall be a party, or any corporation succeeding to the corporate agency or corporate trust business of an Authenticating Agent, shall continue to be an Authenticating Agent, *provided* such corporation shall be otherwise eligible under this Section 614, without the execution or filing of any paper or any further act on the part of the Trustee or the Authenticating Agent.

An Authenticating Agent may resign at any time by giving written notice thereof to the Trustee and to the Company. The Trustee may at any time terminate the agency of an Authenticating Agent by giving written notice thereof to such Authenticating Agent and to the Company. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section 614, the Trustee may appoint a successor Authenticating Agent which shall be acceptable to the Company and shall mail written notice of such appointment by first-class mail, postage prepaid, to all Holders as their names and addresses appear in the Security Register. Any successor Authenticating Agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers and duties of its predecessor hereunder, with like effect as if originally named as an Authenticating Agent. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section 614.

The Trustee agrees to pay to each Authenticating Agent from time to time reasonable compensation for its services under this Section 614, and the Trustee shall be entitled to be reimbursed for such payments, subject to the provisions of Section 607.

If an appointment is made pursuant to this Section 614, the Securities may have endorsed thereon, in addition to the Trustee's certificate of authentication, an alternate certificate of authentication in the following form:

"This is one of the Securities of the series designated therein referred to in the within mentioned Indenture.

AS TRUSTEE

By

AS AUTHENTICATING AGENT

By

AS AUTHORIZED SIGNATORY"

Notwithstanding any provision of this Section 614 to the contrary, if at any time any Authenticating Agent appointed hereunder with respect to any series of Securities shall not also be acting as the Security Registrar hereunder with respect to any series of Securities, then, in addition to all other duties of an Authenticating Agent hereunder, such Authenticating Agent shall also be obligated (i) to furnish to the Security Registrar promptly all information necessary to enable the Security Registrar to maintain at all times an accurate and current Security Register and (ii) prior to authenticating any Security denominated in a foreign currency, to ascertain from the Company the units of such foreign currency that are required to be determined by the Company pursuant to Section 302.

ARTICLE VII

HOLDER'S LISTS AND REPORTS BY TRUSTEE AND COMPANY

SECTION 701. COMPANY TO FURNISH TRUSTEE NAMES AND ADDRESSES OF HOLDERS.

With respect to each series of Securities, the Company will furnish or cause to be furnished to the Trustee:

(a) semi-annually, not more than 15 days after each Regular Record Date relating to that series (or, if there is no Regular Record Date relating to that series, on January 1 and July 1), a list, in such form as the Trustee may reasonably require, of the names and addresses of the Holders of that series as of such dates, and

(b) at such other times as the Trustee may request in writing, within 30 days after the receipt by the Company of any such request, a list of similar form and content, such list to be dated as of a date not more than 15 days prior to the time such list is furnished;

provided, that so long as the Trustee is the Security Registrar, the Company shall not be required to furnish or cause to be furnished such a list to the Trustee. The Company shall otherwise comply with Section 312(a) of the Trust Indenture Act.

SECTION 702. PRESERVATION OF INFORMATION; COMMUNICATIONS TO HOLDERS.

(a) The Trustee shall preserve, in as current a form as is reasonably practicable, the names and addresses of Holders of each series contained in the most recent list furnished to the Trustee as provided in Section 701 and the names and addresses of Holders of each series received by the Trustee in its capacity as Security Registrar. The Trustee may destroy any list furnished to it as provided in Section 701 upon receipt of a new list so furnished. The Trustee shall otherwise comply with Section 312(a) of the Trust Indenture Act.

(b) Holders of Securities may communicate pursuant to Section 312(b) of the Trust Indenture Act with other Holders with respect to their rights under this Indenture or unaffiliated Securities. The Company, the Trustee, the Security Registrar and any other Person shall have the protection of Section 312(c) of the Trust Indenture Act.

SECTION 703. REPORTS BY TRUSTEE.

(a) Within 60 days after May 15 of each year commencing with the year 2018, the Trustee shall transmit by mail to Holders a brief report dated as of such May 15 that complies with Section 313(a) of the Trust Indenture Act. The Trustee shall comply with Section 313(b) of the Trust Indenture Act. The Trustee shall transmit by mail all reports as required by Sections 313(c) and 313(d) of the Trust Indenture Act.

(b) A copy of each report pursuant to Subsection (a) of this Section 703 shall, at the time of its transmission to Holders, be filed by the Trustee with each stock exchange upon which any Securities are listed, with the SEC and with the Company. The Company will notify the Trustee when any Securities are listed or delisted on any stock exchange.

SECTION 704. REPORTS BY COMPANY.

The Company shall file with the Trustee, within 15 days after the Company is required to file the same with the SEC, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the SEC may from time to time by rules and regulations prescribe) which the Company may be required to file with the SEC pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended, and shall otherwise comply with Section 314(a) of the Trust Indenture Act.

Delivery of such reports, information and documents to the Trustee is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officers' Certificates).

ARTICLE VIII

CONSOLIDATION, MERGER, CONVEYANCE,
TRANSFER OR LEASE

SECTION 801. COMPANY MAY CONSOLIDATE, ETC., ONLY ON CERTAIN TERMS.

(a) The Company shall not, directly or indirectly, in any transaction or series of related transactions: (1) consolidate or merge with or into another Person (whether or not it is the surviving corporation); (2) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company and its Subsidiaries taken as a whole, or (3) assign any of its obligations under the Securities and this Indenture, in one or more related transactions, to another Person; unless:

(i) either: (A) the Company is the surviving corporation; or (B) the Person formed by or surviving any such consolidation or merger (if other than the Company) or to which such sale, assignment, transfer, conveyance or other disposition shall have been made is a corporation organized or existing under the laws of the United States, any state thereof or the District of Columbia;

(ii) the Person formed by or surviving any such consolidation or merger (if other than the Company) or the Person to which such sale, assignment, transfer, conveyance or disposition shall have been made assumes all the obligations of the Company under the Securities and this Indenture pursuant to agreements reasonably satisfactory to the Trustee;

(iii) immediately after such transaction no Default or Event of Default exists;

(iv) the Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that such merger, consolidation or sale, assignment, transfer, conveyance or other disposition of such properties or assets or assignment of its obligations under the Securities and this Indenture and such supplemental indenture, if any, comply with this Indenture.

(b) The Company shall not, directly or indirectly, lease all or substantially all of its properties or assets, in one or more related transactions, to any other Person.

(c) Notwithstanding the foregoing, this Section 801 shall not apply to a sale, assignment, transfer, conveyance or other disposition of assets between or among the Company and its Wholly Owned Subsidiaries.

SECTION 802. SUCCESSOR PERSON SUBSTITUTED.

Upon any consolidation or merger, any sale, assignment, transfer, lease, conveyance or other disposition of all or substantially all of the assets of the Company, or any assignment of the obligations under the Securities and this Indenture in accordance with Section 801 hereof, the successor corporation formed by such consolidation or into or with which the Company is merged or to which such sale, assignment, transfer, lease, conveyance or other disposition is made shall succeed to, and be substituted for (so that from and after the date of such consolidation, merger, sale, lease, conveyance or other disposition, the provisions of this Indenture referring to the "Company" shall refer instead to the successor corporation and not to the Company), and may exercise every right and power of the Company under this Indenture with the same effect as if such successor Person had been named as the Company herein; *provided, however*, that the predecessor Company shall not be relieved from the obligation to pay the principal of and interest on the Securities except in the case of a sale of all of the Company's assets that meets the requirements of Section 801 hereof.

ARTICLE IX

SUPPLEMENTAL INDENTURES

SECTION 901. WITHOUT CONSENT OF HOLDERS.

Notwithstanding Section 902 of this Indenture, the Company and the Trustee may amend or supplement this Indenture or the Securities of any series without the consent of any Holder of a Security of any series:

- (a) to cure any ambiguity, defect or inconsistency;
- (b) to provide for uncertificated Securities in addition to or in place of certificated Securities or to alter the provisions of Article II of this Indenture (including the related definitions) in a manner that does not materially adversely affect any Holder;
- (c) to establish the form or terms of Securities of any series as permitted by Sections 201 and 301 of this Indenture;
- (d) to provide for the assumption of the Company's or any Guarantor's obligations to the Holders of the Securities by a successor to the Company pursuant to Article VIII Indenture;
- (e) to make any change that would provide any additional rights or benefits to the Holders of the Securities or that does not adversely affect the legal rights hereunder of any such Holder;
- (f) to comply with requirements of the SEC in order to effect or maintain the qualification of this Indenture under the Trust Indenture Act;
- (g) to evidence and provide the acceptance of the appointment of a successor Trustee pursuant to Sections 610 and 611 of this Indenture; and
- (h) to add a Guarantor of the Securities.

Upon the request of the Company accompanied by a resolution of its Board of Directors authorizing the execution of any such amended or supplemental indenture, and upon receipt by the Trustee of the documents described in Section 603 of this Indenture, the Trustee shall join with the Company in the execution of any amended or supplemental indenture authorized or permitted by the terms of this Indenture and to make any further appropriate agreements and stipulations that may be therein contained, but the Trustee shall not be obligated to enter into such amended or supplemental indenture that affects its own rights, duties or immunities under this Indenture or otherwise.

SECTION 902. WITH CONSENT OF HOLDERS.

Except as provided below in this Section 902, the Company and the Trustee may amend or supplement this Indenture and the Securities of any series may be amended or supplemented with the consent of the Holders of at least a majority in aggregate principal amount at maturity of Securities of that series then Outstanding voting as a single class (including, without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, that series of Securities), and, subject to Sections 504 and 507 hereof, any existing Default or Event of Default (other than a Default or Event of Default in the payment of the principal of, premium, if any, and interest, if any, on such Securities, except a payment default resulting from an acceleration that has been rescinded) or compliance with any provision of this Indenture or such Securities may be waived with the consent of the Holders of a majority in aggregate principal amount at maturity of the then Outstanding Securities of that series voting as a single class (including without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, that series of Securities).

Upon the request of the Company accompanied by a Board Resolution authorizing the execution of any such amended or supplemental indenture, and upon the filing with the Trustee of evidence satisfactory to the Trustee of the consent of the Holders of that series of Securities as aforesaid, and upon receipt by the Trustee of the documents described in Section 603 of this Indenture, the Trustee shall join with the Company in the execution of such amended or supplemental indenture unless such amended or supplemental indenture directly affects the Trustee's own rights, duties or immunities under this Indenture or otherwise, in which case the Trustee may in its discretion, but shall not be obligated to, enter into such amended or supplemental indenture.

It shall not be necessary for the consent of the Holders of Securities under this Section 902 to approve the particular form of any proposed amendment or waiver, but it shall be sufficient if such consent approves the substance thereof.

After an amendment, supplement or waiver under this Section becomes effective, the Company shall mail to the Holders of Securities of any series affected thereby a notice briefly describing the amendment, supplement or waiver. Any failure of the Company to mail such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amended or supplemental indenture or waiver.

Subject to Sections 504 and 507 hereof, the Holders of a majority in aggregate principal amount at maturity of a series of Securities then Outstanding voting as a single class may waive compliance in a particular instance by the Company with any provision of this Indenture or the Securities. However, without the consent of each Holder of a series of Securities affected, an amendment or waiver under this Section 902 may not (with respect to the series of Securities held by a non-consenting Holder):

- (a) reduce the principal amount of the then Outstanding Securities whose Holders must consent to an amendment, supplement or waiver;
- (b) reduce the principal of or change the fixed maturity of any Security or alter any of the provisions with respect to the redemption of the Securities unless otherwise specifically provided for in the supplemental indenture;
- (c) reduce the rate of or change the time for payment of interest on any Security;

- (d) waive a Default or Event of Default in the payment of principal of, or interest or premium, if any, on the Securities (except a rescission of acceleration of the Securities Holders of any series of Securities of at least a majority in aggregate principal amount of the then Outstanding Securities of that series and a waiver of the payment default that resulted from such acceleration);
- (e) make any Security payable in money other than that stated in the Security;
- (f) make any change in the provisions of this Indenture relating to waivers of past Defaults or the rights of Holders of Securities to receive payments of principal of, or interest or premium, if any, on the Securities;
- (g) waive a redemption payment with respect to any Security (other than as may be specifically permitted by the supplemental indenture);
- (h) cause the Securities to become subordinated in right of payment to any other Indebtedness;
- (i) release any Guarantor from any of its obligations under its Guarantee or this Indenture, except in accordance with the terms thereof; or
- (j) make any change in Sections 504 or 507 or the foregoing amendment and waiver provisions.

SECTION 903. COMPLIANCE WITH TRUST INDENTURE ACT.

Every amendment or supplement to this Indenture or the Securities shall be set forth in a amended or supplemental indenture that complies with the Trust Indenture Act as then in effect.

SECTION 904. REVOCATION AND EFFECT OF CONSENTS.

Until an amendment, supplement or waiver becomes effective, a consent to it by a Holder of a Security is a continuing consent by the Holder of a Security and every subsequent Holder of a Security or portion of a Security that evidences the same debt as the consenting Holder's Security, even if notation of the consent is not made on any Security. However, any such Holder of a Security or subsequent Holder of a Security may revoke the consent as to its Security if the Trustee receives written notice of revocation before the date the waiver, supplement or amendment becomes effective. An amendment, supplement or waiver becomes effective in accordance with its terms and thereafter binds every Holder.

SECTION 905. NOTATION ON OR EXCHANGE OF SECURITIES.

The Trustee may place an appropriate notation about an amendment, supplement or waiver on any Security thereafter authenticated. The Company in exchange for all Securities of a series may issue and the Trustee shall, upon receipt of a written order from the Company to authenticate such Securities, authenticate new Securities that reflect the amendment, supplement or waiver.

SECTION 906. TRUSTEE TO SIGN AMENDMENTS, ETC.

The Trustee shall sign any amended or supplemental indenture authorized pursuant to this Article IX if the amendment or supplement does not adversely affect the rights, duties, liabilities or immunities of the Trustee. The Company may not sign an amendment or supplemental indenture until the Board of Directors approves it. In executing any amended or supplemental indenture, the Trustee shall be given and (subject to Section 601 of this Indenture) shall be fully protected in relying upon, in addition to the documents required by Section 603 this Indenture, an Officer's Certificate and an Opinion of Counsel stating that the execution of such amended or supplemental indenture is authorized or permitted by this Indenture.

ARTICLE X

COVENANTS

SECTION 1001. PAYMENT OF PRINCIPAL, PREMIUM AND INTEREST.

The Company covenants and agrees for the benefit of each series of Securities that it will duly and punctually pay the principal of (and premium, if any), interest on and any Additional Amounts with respect to the Securities of that series in accordance with the terms of the Securities and this Indenture.

SECTION 1002. MAINTENANCE OF OFFICE OR AGENCY.

If Securities of a series are issuable only as Registered Securities, the Company will maintain in each Place of Payment for any series of Securities an office or agency where Securities of that series may be presented or surrendered for payment, where Securities of that series may be surrendered for registration of transfer or exchange and where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served. The Company will give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the Corporate Trust Office of the Trustee.

The Company may also from time to time designate one or more other offices or agencies where the Securities of one or more series may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; *provided, however*, that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in each Place of Payment for Securities of any series for such purposes. The Company will give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency.

SECTION 1003. MONEY FOR SECURITIES PAYMENTS TO BE HELD IN TRUST.

If the Company shall at any time act as its own Paying Agent with respect to any series of Securities, it will, on or before each due date of the principal of (and premium, if any) or interest on or any Additional Amounts with respect to any of the Securities of that series, segregate and hold in trust for the benefit of the Persons entitled thereto a sum sufficient to pay the principal (and premium, if any) or interest so becoming due until such sums shall be paid to such Persons or otherwise disposed of as herein provided and will promptly notify the Trustee of its action or failure so to act.

Whenever the Company shall have one or more Paying Agents for any series of Securities, the Company will, on or before each due date of the principal of (and premium, if any) or interest on any Securities of that series, deposit with a Paying Agent a sum sufficient to pay the principal (and premium, if any) or interest so becoming due, such sum to be held in trust for the benefit of the Persons entitled to such principal, premium or interest, and (unless such Paying Agent is the Trustee) the Company will promptly notify the Trustee of its action or failure so to act.

The Company will cause each Paying Agent for any series of Securities other than the Trustee to execute and deliver to the Trustee an instrument in which such Paying Agent shall agree with the Trustee, subject to the provisions of this Section, that such Paying Agent will:

- (1) hold all sums held by it for the payment of the principal of (and premium, if any), interest on or any Additional Amounts with respect to Securities of that series in trust the benefit of the Persons entitled thereto until such sums shall be paid to such Persons or otherwise disposed of as herein provided;
- (2) give the Trustee notice of any default by the Company (or any other obligor upon the Securities of that series) in the making of any payment of principal (and premium, any), interest on or any Additional Amounts with respect to the Securities of that series; and
- (3) at any time during the continuance of any such default, upon the written request of the Trustee, forthwith pay to the Trustee all sums so held in trust by such Paying Agent.

The Company may at any time, for the purpose of obtaining the satisfaction and discharge of this Indenture or for any other purpose, pay, or by Company Order direct any Paying Agent to pay, to the Trustee all sums held in trust by the Company or such Paying Agent, such sums to be held by the Trustee upon the same trusts as those upon which sums were held by the Company or such Paying Agent; and, upon such payment by any Paying Agent to the Trustee, such Paying Agent shall be released from all further liability with respect to such money.

Any money deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of (and premium, if any) or interest on any Security of any series and remaining unclaimed for three years after such principal (and premium, if any) or interest has become due and payable shall, unless otherwise required by mandatory provisions of applicable escheat, or abandoned or unclaimed property law, be paid to the Company on Company Request, or (if then held by the Company) shall be discharged from such trust; and the Holder of such Security shall thereafter, as an unsecured general creditor, look only to the Company for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease; *provided, however*, that the Trustee or such Paying Agent, before being required to make any such repayment, may at the expense of the Company cause to be published once, in an Authorized Newspaper in the Borough of Manhattan, the City of New York and in such other Authorized Newspapers as the Trustee shall deem appropriate, notice that such money remains unclaimed and that, after a date specified herein, which shall not be less than 30 days from the date of such publication, any unclaimed balance of such money then remaining will, unless otherwise required by mandatory provisions of applicable escheat, or abandoned or unclaimed property law, be repaid to the Company.

SECTION 1004. EXISTENCE.

Subject to Article VIII, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence.

SECTION 1005. STATEMENT BY OFFICERS AS TO DEFAULT.

The Company shall deliver to the Trustee, within 120 days after the end of each fiscal year, an Officers' Certificate stating that a review of the activities of the Company and its Subsidiaries during the preceding fiscal year has been made under the supervision of the signing officers with a view to determining whether the Company has kept, observed, performed and fulfilled its obligations under this Indenture, and further stating, as to each such officer signing such certificate, that to the best of his or her knowledge the Company has kept, observed, performed and fulfilled each and every covenant contained in this Indenture and is not in default in the performance or observance of any of the terms, provisions and conditions of this Indenture (or, if a Default or Event of Default shall have occurred, describing all such Defaults or Events of Default of which he or she may have knowledge and what action the Company is taking or proposes to take with respect thereto) and that to the best of his or her knowledge no event has occurred and remains in existence by reason of which payments on account of the principal of or interest, if any, on the Securities is prohibited or if such event has occurred, a description of the event and what action the Company is taking or proposes to take with respect thereto.

The Company shall, so long as any of the Securities are outstanding, deliver to the Trustee, forthwith and in any event within five days upon any officer becoming aware of any Default or Event of Default or an event which, with notice or the lapse of time or both, would constitute an Event of Default, an Officers' Certificate specifying such Default or Event of Default and what action the Company is taking or proposes to take with respect thereto.

SECTION 1006. WAIVER OF CERTAIN COVENANTS.

The Company may omit in any particular instance to comply with any covenant or condition set forth in Section 1005, or any covenant added for the benefit of any series of Securities as contemplated by Section 301 (unless otherwise specified pursuant to Section 301) if before or after the time for such compliance the Holders of a majority in principal amount of the Outstanding Securities of all series affected by such omission (acting as one class) shall, by Act of such Holders, either waive such compliance in such instance or generally waive compliance with such covenant or condition, but no such waiver shall extend to or affect such covenant or condition except to the extent so expressly waived, and, until such waiver shall become effective, the obligations of the Company and the duties of the Trustee in respect of any such covenant or condition shall remain in full force and effect.

SECTION 1007. ADDITIONAL AMOUNTS.

If the Securities of a series expressly provide for the payment of Additional Amounts, the Company will pay to the Holder of any Security of such series Additional Amounts as expressly provided therein. Whenever in this Indenture there is mentioned, in any context, the payment of the principal of or any premium or interest on, or in respect of, any Security of any series or the net proceeds received from the sale or exchange of any Security of any series, such mention shall be deemed to include mention of the payment of Additional Amounts provided for in this Section 1007 to the extent that, in such context, Additional Amounts are, were or would be payable in respect thereof pursuant to the provisions of this Section 1007 and express mention of the payment of Additional Amounts (if applicable) in any provisions hereof shall not be construed as excluding Additional Amounts in those provisions hereof where such express mention is not made.

If the Securities of a series provide for the payment of Additional Amounts, at least 10 days prior to the first Interest Payment Date with respect to that series of Securities (or if the Securities of that series will not bear interest prior to Maturity, the first day on which a payment of principal and any premium is made), and at least 10 days prior to each date of payment of principal and any premium or interest if there has been any change with respect to the matters set forth in the below-mentioned Officers' Certificate, the Company shall furnish the Trustee and the Company's principal Paying Agent or Paying Agents, if other than the Trustee, with an Officers' Certificate instructing the Trustee and such Paying Agent or Paying Agents whether such payment of principal of and any premium or interest on the Securities of that series shall be made to Holders of Securities of that series who are United States Aliens without withholding for or on account of any tax, assessment or other governmental charge described in the Securities of that series. If any such withholding shall be required, then such Officers' Certificate shall specify by country the amount, if any, required to be withheld on such payments to such Holders of Securities and the Company will pay to such Paying Agent the Additional Amounts required by this Section. The Company covenants to indemnify the Trustee and any Paying Agent for, and to hold them harmless against any loss, liability or expense reasonably incurred without negligence or willful misconduct on their part arising out of or in connection with actions taken or omitted by any of them in reliance on any Officers' Certificate furnished pursuant to this Section 1007.

ARTICLE XI

REDEMPTION OF SECURITIES

SECTION 1101. APPLICABILITY OF ARTICLE.

Securities of any series which are redeemable before their Stated Maturity shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 301 for Securities of any series) in accordance with this Article.

SECTION 1102. ELECTION TO REDEEM; NOTICE TO TRUSTEE.

The election of the Company to redeem any Securities shall be evidenced by a Board Resolution. In case of any redemption at the election of the Company of less than all the Securities of any series, the Company shall, a reasonable period prior to the Redemption Date fixed by the Company (unless a shorter notice shall be satisfactory to the Trustee), notify the Trustee of such Redemption Date and of the principal amount of Securities of such series to be redeemed. In the case of any redemption of Securities prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, the Company shall furnish the Trustee with an Officers' Certificate evidencing compliance with such restriction.

SECTION 1103. SELECTION BY TRUSTEE OF SECURITIES TO BE REDEEMED.

If less than all the Securities of any series are to be redeemed, the particular Securities to be redeemed shall be selected not more than 60 days prior to the Redemption Date by the Trustee, from the Outstanding Securities of such series not previously called for redemption, by such method as the Trustee shall deem fair and appropriate and that may provide for the selection for redemption of portions (equal to the minimum authorized denomination for Securities of that series or any integral multiple thereof) of the principal amount of Securities of such series of a denomination larger than the minimum authorized denomination for Securities of that series or of the principal amount of global Securities of such series.

The Trustee shall promptly notify the Company and the Security Registrar in writing of the Securities selected for redemption and, in the case of any Securities selected for partial redemption, the principal amount thereof to be redeemed.

For all purposes of this Indenture, unless the context otherwise requires, all provisions relating to the redemption of Securities shall relate, in the case of any Securities redeemed or to be redeemed only in part, to the portion of the principal amount of such Securities which has been or is to be redeemed.

SECTION 1104. NOTICE OF REDEMPTION.

Notice of redemption shall be given in the manner provided in Section 107 to each Holder of Securities to be redeemed not less than 30 nor more than 60 days prior to the Redemption Date.

All notices of redemption shall state:

- (1) the Redemption Date,
- (2) the Redemption Price,
- (3) if less than all the Outstanding Securities of any series are to be redeemed, the identification (and, in the case of partial redemption, the principal amounts) of the particular Securities to be redeemed,
- (4) that on the Redemption Date the Redemption Price will become due and payable upon each such Security to be redeemed and, if applicable, that interest thereon will cease to accrue on and after said date,
- (5) the place or places where such Securities are to be surrendered for payment of the Redemption Price,
- (6) that the redemption is for a sinking fund, if such is the case, and
- (7) the "CUSIP" number, if applicable.

A notice of redemption as contemplated by Section 107 need not identify particular Registered Securities to be redeemed. Notice of redemption of Securities to be redeemed at the election of the Company shall be given by the Company or, at the Company's request and provision to the Trustee of the notice information 10 days prior to delivery of the notice, by the Trustee in the name and at the expense of the Company.

SECTION 1105. DEPOSIT OF REDEMPTION PRICE.

On or before 10:00 a.m., New York City time, on any Redemption Date, the Company shall deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, segregate and hold in trust as provided in Section 1003) an amount of money sufficient to pay the Redemption Price of, and (except if the Redemption Date shall be an Interest Payment Date) accrued interest on and any Additional Amounts with respect to all the Securities to be redeemed on that date.

SECTION 1106. SECURITIES PAYABLE ON REDEMPTION DATE.

Notice of redemption having been given as aforesaid, the Securities so to be redeemed shall, on the Redemption Date, become due and payable at the Redemption Price therein specified, and from and after such date (unless the Company shall default in the payment of the Redemption Price and accrued interest) such Securities shall cease to bear interest. Upon surrender of any such Security for redemption in accordance with said notice, such Security shall be paid by the Company at the Redemption Price, together with accrued interest (and any Additional Amounts) to the Redemption Date; *provided, however*, that installments of interest whose Stated Maturity is on or prior to the Redemption Date shall be payable to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 307.

If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal (and premium, if any) shall, until paid, bear interest from the Redemption Date at the rate prescribed therefor in the Security or, in the case of Original Issue Discount Securities, the Securities' Yield to Maturity.

SECTION 1107. SECURITIES REDEEMED IN PART.

Any Registered Security which is to be redeemed only in part shall be surrendered at a Place of Payment therefor (with, if the Company or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to the Company and the Trustee duly executed by, the Holder thereof or his attorney duly authorized in writing), and the Company shall execute, and the Trustee shall authenticate and deliver to the Holder of such Security without service charge, a new Registered Security or Securities of the same series and Stated Maturity, of any authorized denomination as requested by such Holder, in aggregate principal amount equal to and in exchange for the unredeemed portion of the principal of the Security so surrendered.

SECTION 1108. PURCHASE OF SECURITIES.

Unless otherwise specified as contemplated by Section 301, the Company and any Affiliate of the Company may at any time purchase or otherwise acquire Securities in the open market or by private agreement. Such acquisition shall not operate as or be deemed for any purpose to be a redemption of the indebtedness represented by such Securities. Any Securities purchased or acquired by the Company may be delivered to the Trustee and, upon such delivery, the indebtedness represented thereby shall be deemed to be satisfied. Section 309 shall apply to all Securities so delivered.

ARTICLE XII

SINKING FUNDS

SECTION 1201. APPLICABILITY OF ARTICLE.

The provisions of this Article shall be applicable to any sinking fund for the retirement of Securities of a series except as otherwise specified as contemplated by Section 301 for Securities of such series.

The minimum amount of any sinking fund payment provided for by the terms of Securities of any series is herein referred to as a "mandatory sinking fund payment," and any payment in excess of such minimum amount provided for by the terms of Securities of any series is herein referred to as an "optional sinking fund payment." Unless otherwise provided by the terms of Securities of any series, the cash amount of any sinking fund payment may be subject to reduction as provided in Section 1202. Each sinking fund payment shall be applied to the redemption of Securities of any series as provided for by the terms of Securities of such series.

SECTION 1202. SATISFACTION OF SINKING FUND PAYMENTS WITH SECURITIES.

The Company (1) may deliver Outstanding Securities of a series (other than any previously called for redemption), and (2) may apply as a credit Securities of a series which have been redeemed either at the election of the Company pursuant to the terms of such Securities or through the application of permitted optional sinking fund payments pursuant to the terms of such Securities, in each case in satisfaction of all or any part of any sinking fund payment with respect to the Securities of such series required to be made pursuant to the terms of such Securities as provided for by the terms of such series; *provided* that such Securities have not been previously so credited. Such Securities shall be received and credited for such purpose by the Trustee at the Redemption Price specified in such Securities for redemption through operation of the sinking fund and the amount of such sinking payment shall be reduced accordingly.

SECTION 1203. REDEMPTION OF SECURITIES FOR SINKING FUND.

Not less than 45 days prior (unless a shorter period shall be satisfactory to the Trustee) to each sinking fund payment date for any series of Securities, the Company will deliver to the Trustee an Officers' Certificate specifying the amount of the next ensuing sinking fund payment for that series pursuant to the terms of that series, the portion thereof, if any, which is to be satisfied by payment of cash and the portion thereof, if any, which is to be satisfied by delivery of or by crediting Securities of that series pursuant to Section 1202 and will also deliver to the Trustee any Securities to be so delivered. Not less than 30 days before each such sinking fund payment date the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 1103 and cause notice of the redemption thereof to be given in the name of and at the expense of the Company in the manner provided in Section 1104. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Sections 1106 and 1107.

ARTICLE XIII

MEETINGS OF HOLDERS OF SECURITIES

SECTION 1301. PURPOSES FOR WHICH MEETINGS MAY BE CALLED.

A meeting of Holders of Securities of any or all series may be called at any time and from time to time pursuant to this Article to make, give or take any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be made, given or taken by Holders of Securities of such series.

SECTION 1302. CALL, NOTICE AND PLACE OF MEETINGS.

(a) The Trustee may at any time call a meeting of Holders of Securities of any series for any purpose specified in Section 1301, to be held at such time and at such place in of Manhattan, the City of New York, or in any other location, as the Trustee shall determine. Notice of every meeting of Holders of Securities of any series, setting forth the time and the place of such meeting and in general terms the action proposed to be taken at such meeting, shall be given, in the manner provided in Section 107, not less than 20 nor more than 180 days prior to the date fixed for the meeting.

(b) In case at any time the Company, pursuant to a Board Resolution, or the Holders of at least 10% in aggregate principal amount of the Outstanding Securities of any series have requested the Trustee for any such series to call a meeting of the Holders of Securities of such series for any purpose specified in Section 1301, by written request setting forth in reasonable detail the action proposed to be taken at the meeting, and the Trustee shall not have made the first publication of the notice of such meeting within 30 days after receipt of such request or shall not thereafter proceed to cause the meeting to be held as provided herein, then the Company or the Holders of Securities of such series in the amount above specified, as the case may be, may determine the time and the place in the Borough of Manhattan, the City of New York for such meeting and may call such meeting for such purposes by giving notice thereof as provided in Subsection (a) of this Section.

SECTION 1303. PERSONS ENTITLED TO VOTE AT MEETINGS.

To be entitled to vote at any meeting of Holders of Securities of any series, a Person shall be (1) a Holder of one or more Outstanding Securities of such series, or (2) a Person appointed by an instrument in writing as proxy for a Holder or Holders of one or more Outstanding Securities of such series by such Holder or Holders. The only Persons who shall be entitled to be present or to speak at any meeting of Holders of Securities of any series shall be the Persons entitled to vote at such meeting and their counsel, any representatives of the Trustee and its counsel and any representatives of the Company and its counsel.

SECTION 1304. QUORUM; ACTION.

The Persons entitled to vote a majority in aggregate principal amount of the Outstanding Securities of a series shall constitute a quorum for a meeting of Holders of Securities of such series. In the absence of a quorum within 30 minutes of the time appointed for any such meeting, the meeting shall, if convened at the request of Holders of Securities of such series, be dissolved. In any other case, the meeting may be adjourned for a period of not less than 10 days as determined by the chairman of the meeting prior to the adjournment of such meeting. In the absence of a quorum at any such adjourned meeting, such adjourned meeting may be further adjourned for a period of not less than 10 days as determined by the chairman of the meeting prior to the adjournment of such adjourned meeting. Subject to Section 1305(d), notice of the reconvening of any adjourned meeting shall be given as provided in Section 1302(a), except that such notice need be given only once not less than five days prior to the date on which the meeting is scheduled to be reconvened. Notice of the reconvening of an adjourned meeting shall state expressly that Persons entitled to vote a majority in principal amount of the Outstanding Securities of such series shall constitute a quorum.

Except as limited by the proviso to Section 902, any resolution presented to a meeting or adjourned meeting duly reconvened at which a quorum is present as aforesaid may be adopted by the affirmative vote of the Holders of a majority in aggregate principal amount of the Outstanding Securities of that series; *provided, however*, that, except as limited by the proviso to Section 902, any resolution with respect to any request, demand, authorization, direction, notice, consent or waiver which this Indenture expressly provides may be made, given or taken by the Holders of a specified percentage that is less than a majority in aggregate principal amount of the Outstanding Securities of a series may be adopted at a meeting or an adjourned meeting duly reconvened and at which a quorum is present as aforesaid by the affirmative vote of the Holders of such specified percentage in aggregate principal amount of the Outstanding Securities of that series.

Except as limited by the fourth paragraph of Section 902, any resolution passed or decision taken at any meeting of Holders of Securities of any series duly held in accordance with this Section shall be binding on all the Holders of Securities of such series, whether or not present or represented at the meeting.

SECTION 1305. DETERMINATION OF VOTING RIGHTS; CONDUCT AND ADJOURNMENT OF MEETINGS.

(a) The holding of Securities shall be proved in the manner specified in Section 105 and the appointment of any proxy shall be proved in the manner specified in Section 106. Written instruments appointing proxies, regular on their face, may be presumed valid and genuine without the proof specified in Section 105 or other proof.

(b) The Trustee shall, by an instrument in writing, appoint a temporary chairman of the meeting, unless the meeting shall have been called by the Company or by Holders of Securities as provided in Section 1302(b), in which case the Company or the Holders of Securities of the series calling the meeting, as the case may be, shall appoint a temporary chairman. A permanent chairman and a permanent secretary of the meeting shall be elected by vote of the Persons entitled to vote a majority in aggregate principal amount of the Outstanding Securities of such series represented at the meeting.

(c) At any meeting each Holder of a Security of such series and each proxy shall be entitled to one vote for each \$1,000 principal amount (or such other amount of the minimum denomination of any series of Securities as may be provided in the establishment of such series as contemplated by Section 301 hereof) of the Outstanding Securities of such series held or represented by him; *provided, however*, that no vote shall be cast or counted at any meeting in respect of any Security challenged as not Outstanding and ruled by the chairman of the meeting to be not Outstanding. The chairman of the meeting shall have no right to vote, except as a Holder of a Security of such series or as a proxy.

(d) Any meeting of Holders of Securities of any series duly called pursuant to Section 1302 at which a quorum is present may be adjourned from time to time by Persons entitled to vote a majority in aggregate principal amount of the Outstanding Securities of such series represented at the meeting; and the meeting may be held as so adjourned without further notice.

SECTION 1306. COUNTING VOTES AND RECORDING ACTION OF MEETINGS.

The vote upon any resolution submitted to any meeting of Holders of Securities of any series shall be by written ballots on which shall be subscribed the signatures of the Holders of Securities of such series or of their representatives by proxy and the principal amounts and serial numbers of the Outstanding Securities of such series held or represented by them. The permanent chairman of the meeting shall appoint two inspectors of votes who shall count all votes cast at the meeting for or against any resolution and who shall make and file with the secretary of the meeting their verified written reports in duplicate of all votes cast at the meeting. A record, at least in duplicate, of the proceedings of each meeting of Holders of Securities of any series shall be prepared by the secretary of the meeting and there shall be attached to such record the original reports of the inspectors of votes on any vote by ballot taken thereat and affidavits by one or more Persons having knowledge of the facts setting forth a copy of the notice of the meeting and showing that such notice was given as provided in Section 1302 and, if applicable, Section 1304. Each copy shall be signed and verified by the affidavits of the permanent chairman and secretary of the meeting and one such copy shall be delivered to the Company, and another to the Trustee to be preserved by the Trustee, the latter to have attached thereto the ballots voted at the meeting. Any record so signed and verified shall be conclusive evidence of the matters therein stated.

* * *

This instrument may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same instrument.

[Signatures on following page]

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed as of the day and year first above written.

DUOS TECHNOLOGIES GROUP, INC.

By: _____

Name:

Title:

_____, as Trustee

By:

Name:

Title:

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 of Duos Technologies Group, Inc. and Subsidiaries of our report dated March 31, 2023 on the consolidated financial statements of Duos Technologies Group, Inc. as of December 31, 2022 and 2021 and for each of the two years in the period ended December 31, 2022 and to the reference to our firm under the heading "Experts" in the prospectus.

/s/ Salberg & Company, P.A.
SALBERG & COMPANY, P.A.
Boca Raton, Florida
June 12, 2023

Calculation of Filing Fee Tables

Form S-3
(Form Type)Duos Technologies Group, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Newly Registered Securities											
Fees to Be Paid	Equity	Common Stock, Par Value \$0.001 per share	(1)	(1)	(1)	(1)	(1)	—	—	—	—
Fees to Be Paid	Equity	Preferred Stock, Par Value \$0.001 per share	(1)	(1)	(1)	(1)	(1)	—	—	—	—
Fees to Be Paid	Debt	Debt Securities	(1)	(1)	(1)	(1)	(1)	—	—	—	—
Fees to Be Paid	Other	Warrants	(1)	(1)	(1)	(1)	(1)	—	—	—	—
Fees to Be Paid	Other	Rights	(1)	(1)	(1)	(1)	(1)	—	—	—	—
Fees to Be Paid	Other	Units (2)	(1)	(1)	(1)	(1)	(1)	—	—	—	—
Fees to Be Paid	Unallocated (Universal) Shelf	Unallocated (Universal) Shelf	Rule 457(o)	(1)	(1)	\$ 50,000,000	0.0001102	\$ 5,510.00	—	—	—
Fees Previously Paid	-	-	—	—	—	—	—	—	—	—	—
Carry Forward Securities											
Carry Forward Securities											
									Total Offering Amounts	\$	
									Total Fees Previously Paid	-	
									Total Fee Offsets	-	

Table 2: Fee Offset Claims and Sources

	Registrant or Flier Name	Form or Filing Type	File Number	Initial Filing		Fee Offset Claimed	Security Type Associated with Fee Offset Claimed	Security Title Associated with Fee Offset Claimed	Unsold Securities Associated with Fee Offset Claimed	Unsold Aggregate Offering Amount Associated with Fee Offset Claimed	Fee Paid with Fee Offset Source
				Date	Filing Date						
Rules 457(b) and 0-11(a)(2)											
Fee Offset Claims											
Fee Offset Sources											
Rule 457(p)											
Fee Offset Claims	Duos Technologies Group, Inc.	424(b)(5)	333-237213		02/07/2022	\$5,698.86 (3)	Equity	Common Stock	-	\$43,905,000	
Fee Offset Sources	Duos Technologies Group, Inc.	S-3	333-237213		03/16/2020						\$6,490.00 (3)

Table 3: Combined Prospectuses

Security Type	Security Class Title	Amount of Securities Previously Registered	Maximum Aggregate Offering Price of Securities Previously Registered	Form Type	File Number	Initial Effective Date
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(1) Pursuant to Instruction 2.A(iii)(b) of item 16(b) of Form S-3, this information is not required to be included. An indeterminate amount of the securities of each identified class is being registered as may from time to time be offered under this registration statement at indeterminate prices, along with an indeterminate number of securities that may be issued upon exercise, settlement, exchange or conversion of securities offered or sold under this registration statement, as shall have an aggregate initial offering price of up to \$50,000,000. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), the securities being registered include such indeterminate number of additional securities as may become issuable after the date hereof as a result of stock splits, stock dividends, anti-dilution adjustments and similar transactions. The total amount to be registered and the proposed maximum aggregate offering price are estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act.

(2) Units may be issued under a unit agreement and will represent an interest in one or more securities registered under this registration statement including shares of common stock or preferred stock, debt securities, warrants or rights, in any combination, which may or may not be separable from each other.

(3) Duos Technologies Group, Inc. ("Duos") filed a universal shelf Registration Statement on Form S-3 (Registration No. 333-237213) on March 16, 2020, registering securities with an aggregate offering price of up to \$50,000,000 (the "Prior Registration Statement"). In connection with the filing of the Prior Registration Statement, Duos made a contemporaneous fee payment in the amount of \$6,490.00. Pursuant to a 424(b)(5) prospectus supplement, dated February 7, 2022, Duos offered shares of common stock with an aggregate offering price of \$6,095,000. As of the date of this registration statement, securities having an aggregate offering price of \$43,905,000 were not sold under the Prior Registration Statement. Pursuant to Rule 457(p) promulgated under the Securities Act, \$5,510.00 of the \$5,698.86 registration fee that has already been paid and remains unused with respect to the securities that were previously registered pursuant to the Prior Registration Statement and were not sold thereunder may be applied to the filing fees payable pursuant to this registration statement. Duos has terminated the offering that included the unsold securities under the Prior Registration Statement.