

May 2, 2024



Duos Granted Comprehensive Patent for Railcar Scanning

Another patent for Railcar Inspection Portal (“RIP®”) technology confirms Duos as the intellectual property leader for high-speed scanning of freight and passenger rolling stock

JACKSONVILLE, Fla., May 02, 2024 (GLOBE NEWSWIRE) -- [Duos Technologies Group, Inc.](#) (“Duos” or the “Company”) (Nasdaq: DUOT) through its operating subsidiary Duos Technologies, Inc. a provider of Machine Vision and Artificial Intelligence (“AI”) to analyze fast moving freight, passenger and transit trains and trucks, today proudly announces the granting of another patent for its revolutionary railcar inspection technology. Titled "[Device to Capture High Resolution Images of a Train as it Passes Through an Inspection Portal](#)," this patent confirms Duos' methodology and the supporting technology as the standard for wayside detection, transforming railcar inspection processes through innovative state-of-the-art engineering and AI.



As the inventor of the technology and the process for implementation, Duos’ latest patent for a comprehensive wayside detection system gives railcar operators and owners an efficient, high function alternative to manual inspection. In some cases, rail operators have been able to use the Duos automated inspection technologies covered by this patent, to obtain waivers, eliminating certain Federal Railroad Administration (“FRA”) mandated inspections. Duos developed the concept more than 12 years ago and has been constantly refining and upgrading the system. With the granting of this patent, Duos now has 10 patents covering all aspects of automated visual inspection of railcars and has a further six pending for visualization of moving objects.

A recent article, sponsored by Dell Technologies, in Forbes magazine ("[AI at the Edge: The](#)

[New Vanguard of Railway Innovation](#)") discusses the Duos RIP and highlights how "AI is transforming the railway industry, making it more efficient and safer, and showing how this historic industry is modernizing while holding on to its roots."

The newly issued patent discusses the methodology and related technology, detailing the advanced engineering from Duos, sophisticated lighting systems, and state-of-the-art sensors to capture high-resolution images of trains as they traverse Duos' Railcar Inspection Portal ([RIP®](#)). With proprietary line scan camera technology ensuring precise image capture, anomalies or defects on railcars can be accurately detected with unprecedented accuracy.

"Duos' latest patent marks a significant milestone in our ongoing mission to revolutionize railcar inspection processes," commented Chuck Ferry, CEO of Duos. "In development for many years, this technology is in productive use in 13 locations across the US, Canada and Mexico, with an additional three locations expected within nine months. The full system covered by this patent delivers value by identifying even the most minor anomalies or defects according to AAR and FRA Rules and Regulations, thereby helping to facilitate the safety and reliability of rail transportation networks."

The combination of the RIP, AI and associated Edge Data Centers provides a comprehensive solution to the rail operators. The Company is also expanding its target market by offering bespoke solutions such as subscriptions for customized data, specific industry applications outside of traditional rail operations and high-speed edge data processing. The underlying technology is developed and supported "in-house" using AI and rail industry experts. This patent confirms the integrated approach giving Duos a significant advantage in terms of custom-built implementations and speed of results delivery versus a home-grown system using third party developers.

Duos was recently granted a rail safety [AI patent](#) incorporating supervised machine learning. This combined with the recently awarded patent covers an integrated set of technology that offers rail operators a completely integrated railcar inspection system designed to detect defects and prevent costly derailments.

To stay up to date on the Company's most recent developments or to learn more about the Duos story and its revolutionary technology platforms, be sure to follow [here](#) or sign up for email alerts [here](#). For more information please contact DUOT@duostech.com or visit the Company's website and social media channels: [Website](#), [LinkedIn](#), [Twitter](#).

About Duos Technologies Group, Inc.

Duos Technologies Group, Inc. (Nasdaq: DUOT), based in Jacksonville, Florida, through its wholly owned subsidiary, Duos Technologies, Inc., designs, develops, deploys and operates intelligent vision-based technology solutions using Machine Vision and Artificial Intelligence ("AI") to analyze fast moving freight, passenger and transit trains and trucks streamlining operations, improving safety and reducing costs. The Company provides cutting edge solutions that automate the mechanical and security inspection of fast-moving trains, trucks and automobiles through a broad range of proprietary hardware, software, information technology and artificial intelligence. For more information, visit www.duostech.com.

Forward- Looking Statements

This news release includes forward-looking statements within the meaning of Section 27A of

the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, regarding, among other things our plans, strategies and prospects -- both business and financial. Although we believe that our plans, intentions and expectations reflected in or suggested by these forward-looking statements are reasonable, we cannot assure you that we will achieve or realize these plans, intentions or expectations. Forward-looking statements are inherently subject to risks, uncertainties and assumptions. Many of the forward-looking statements contained in this news release may be identified by the use of forward-looking words such as "believe," "expect," "anticipate," "should," "planned," "will," "may," "intend," "estimated," and "potential," among others. Important factors that could cause actual results to differ materially from the forward-looking statements we make in this news release include market conditions and those set forth in reports or documents that we file from time to time with the United States Securities and Exchange Commission. We do not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements to reflect any change in our expectations or any change in events, conditions or circumstances on which any such statement is based, except as required by law. All forward-looking statements attributable to Duos Technologies Group, Inc. or a person acting on its behalf are expressly qualified in their entirety by this cautionary language.

A photo accompanying this announcement is available at:

<https://www.globenewswire.com/NewsRoom/AttachmentNg/188774db-3888-4abd-b5f7-1ccd9109581c>

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Source: Duos Technologies Group, Inc

