

ASX Announcement

31 July 2026

2nd US Patent Allowed Reinforcing Protection for Graphene-Coated Products

New product-focused claims complement Adisyn's earlier granted US patent, further strengthening protection for its graphene technology targeting next-generation semiconductors

Highlights

- **US Patent Application No. 18/835,836 allowed by the United States Patent and Trademark Office, covering graphene-coated three-dimensional surfaces exhibiting unique properties**
- **Product-focused claims protect graphene-coated surfaces with a uniform, conformal coating over complex three-dimensional geometries**
- **Protection is directed to the products and their specifications, irrespective of how they are manufactured, including routes that do not rely on Adisyn's own precursors or processes**
- **Protection extends to interconnects defined by specific physical properties, including copper grain size, defect characteristics and the absence of diffusion barrier coating materials**
- **Claims also cover graphene coatings free of nitrogen doping, catalyst residuals and metal nanoparticle contamination, addressing key purity benchmarks for semiconductor-grade applications**
- **The allowance complements the US patent announced on 7 May 2026, building a broader portfolio of protection across Adisyn's graphene manufacturing methods and graphene-coated products**

Adisyn Ltd (ASX: AI1) ("Adisyn" or "the Company") is pleased to announce that the United States Patent and Trademark Office (USPTO) has allowed US Patent Application No. 18/835,836, titled Graphene Coated Surfaces Manufactured By Atomic Or Molecular Layer Deposition.

The application, jointly held by Adisyn's wholly-owned subsidiary 2D Generation Ltd. (2DG) and its research partner, provides further protection for graphene-coated surfaces relevant to the Company's semiconductor technology.

The allowed claims cover graphene-coated surfaces characterised by one or more of the following specifications:

- i. a median copper grain size of less than 0.9 microns;
- ii. a lower incidence of shorts and voids compared with a similar interconnect exposed to temperatures of 400°C or higher;
- iii. interconnect metal substantially free of diffusion barrier coating materials; and/or
- iv. a graphene coating free of nitrogen doping, FeCl₃ residuals and/or residual metal catalyst nanoparticles.

Protection Independent of Manufacturing Method

The allowance is significant because the claims are directed to the end-product itself, rather than being limited to a specific method of manufacture.

The claims cover graphene-coated surfaces featuring a uniform, conformal coating over complex three-dimensional geometries, together with interconnects defined by specific physical properties.

As the claims are directed to the product, the protection applies irrespective of how the coated surface or interconnect is produced, including manufacturing routes that do not rely on Adisyn's own precursors or processes.

This complements the Company's earlier US patent allowance, announced on 7 May 2026, which covers the method of applying tethered graphene coatings to metallic surfaces and the resulting coated products and devices. Together, the allowances strengthen Adisyn's protection across both its manufacturing technology and the specifications of the resulting graphene-coated products.

Layered Intellectual Property Protection

Adisyn's intellectual property strategy extends beyond registered patents. The Company also protects key elements of its technology through trade secrets, proprietary processes, accumulated know-how and practical operating expertise.

Adisyn intends to continue expanding its formal patent portfolio where appropriate, while retaining selected know-how internally. This combination of patent rights, trade secrets and operational expertise provides layered protection as the Company advances commercial engagement and process scale-up.

Commenting on the patent allowance, Adisyn Managing Director Arye Kohavi said:

"This allowance is another important step in strengthening Adisyn's intellectual property position. The patent allowance announced on 7 May protects a graphene coating method and its outputs. This latest allowance adds product-focused claims covering graphene-coated surfaces and interconnects with defined characteristics, including manufacturing routes that do not rely on the Adisyn's own precursors or processes.

These characteristics are directly relevant to the challenges facing next-generation semiconductors. Copper grain size and reduced shorts and voids can influence electrical resistivity and thermal performance, while removing conventional diffusion barrier materials may create additional space as processors continue to scale.

Together with our trade secrets and proprietary know-how, this growing patent portfolio strengthens our ability to protect the technology as we progress industry engagement and commercialisation."

Next Steps

Adisyn will continue to advance the commercialisation of its graphene technology, including its semiconductor interconnect program and radar signature reduction vertical. The Company is progressing engagement with potential partners and customers in both areas and will provide further updates as appropriate.

The Company is also evaluating the extension of its intellectual property position through additional patent filings in relevant jurisdictions.

This announcement has been approved for release by the Board of Adisyn Ltd.

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Further Information:

Investors

Arye Kohavi
Managing Director, Adisyn
E: investors@adisyn.com
T: 08 6158 9990

Media

David Tasker
Chapter One Advisors
E: dtasker@chapteroneadvisors.com.au
T: +61 433 112 936

About Adisyn

Adisyn Ltd (ASX: AI1) is an Australian technology company developing advanced graphene materials for high-value applications in the semiconductor and advanced materials sectors.

The Company's core focus is the development of a patented low-temperature Atomic Layer Deposition (ALD) process designed to enable direct graphene growth on semiconductor wafers, addressing the performance limitations of copper interconnects in next-generation semiconductor devices.

Adisyn is also exploring additional commercial applications of its graphene expertise, including advanced composite materials designed to reduce radar signatures in UAV and defence platforms.

Adisyn's broader business includes Adisyn Services, which provides managed IT services, cloud, cybersecurity and artificial intelligence solutions to Australian small and medium-sized enterprises.

Forward-looking statements:

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices, or potential growth of Adisyn Ltd are, or may be, forward-looking statements. Such statements relate to future events and expectations and as such, involve known and unknown risks and uncertainties. These forward-looking statements are not guarantees or predictions of future performance and involve known and unknown risks, uncertainties, and other factors, many of which are beyond the Company's control, and which may cause actual results to differ materially from those expressed in the statements contained in this release.

The Company cautions shareholders and prospective shareholders not to place undue reliance on forward-looking statements, which reflect the Company's expectations only as of the date of this announcement. The Company disclaims any obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by law.