



PRESS RELEASE

May 2, 2023

Ziccum AB filing three patent applications as part of new, expanded strategy to strengthen patent protection

Ziccum AB (publ) ('Ziccum') has filed the three first patent applications in a new series that will significantly strengthen the company's intellectual property (IP) position. The new, expanded IP strategy will provide multi-layered protection to the company's unique drying technology LaminarPace, turning liquid biopharmaceuticals into thermostable dry powders by mass transfer.

Ziccum has now filed the three first of a series of new European patent applications as part of a new, expanded IP strategy. The strategy is taking a multi-layered approach to cover and protect the full range of Ziccum's innovations. New patents will cover the company's formulations of biopharmaceuticals for optimal LaminarPace drying, key operational parameters in its mass transfer drying system LaminarPace, and improved configuration of the drying equipment itself.

The new strategy is being carried out in collaboration with the new partner aera, a European IP Consultancy headquartered in Denmark. The three first applications, filed on 28 April, are expected to be followed by more during both 2023 and 2024.

The expanded IP strategy is implemented in a period of intense scientific, technological and business development for Ziccum: Since mid-2022 the company has opened up and driven forward a significant pipeline of new dialogues within the pharmaceutical industry. In December 2022, it began an ongoing partnership with the Institute of Computational Physics at the Zurich University of Applied Sciences' School of Engineering, which is developing 3D modelling and voluminous new data on its drying system LaminarPace. In March 2023, the company announced significant results in its in-house project, drying mRNA/LNP materials. These technological development efforts have generated the basis for new patent applications.

The first patent application

The first application covers certain aspects of Ziccum's nanoparticle formulation. Lipid nanoparticles (LNPs) is the preferred drug delivery vehicle in today's mRNA Covid-19 vaccines. Ziccum announced that it had successfully dried LNPs (a notoriously challenging procedure) in October 2022. In March 2023, the company reported that it had successfully dried *active* mRNA in LNP formulation, with a promising, commercially viable level of mRNA activity demonstrated after drying and reconstitution to liquid.

The second patent application

Secondly, an application was filed covering new equipment configuration in the LaminarPace drying unit. By a modified design, higher nebulization rates with maintained drying efficacy and gentle product treatment have been achieved, thus enabling a significantly higher production capacity – a necessity to meet the industrial level requirements for biopharmaceutical processing.

The third patent application

Thirdly, Ziccum filed an application regarding the parameters used for optimal LaminarPace drying, based on recent, valuable learnings in the on-going work with internal trials.

Ziccum CEO Ann Gidner: “Robust IP is at the heart of a Technology Platform company, and a strong IP strategy is important for Ziccum, both protecting our innovations and enabling the company to execute on its business model. Our new, expanded IP strategy will deliver multi-layered coverage. I am truly delighted to now protect formulation parameters optimizing the unique mass transfer drying effect, further innovation to increase the all-important drying capacity and LaminarPace operational parameters. It is a great step for our IP position.”

For more information about Ziccum, please contact:

Ann Gidner,
CEO Ziccum
Mail: gidner@ziccum.com
Mobile: +46 722140141

Fredrik Sjövall,
Chairman of the Board, Ziccum AB
Mail: sjovall@ziccum.com
Mobile: +46 706 45 08 75

Ziccum's Certified Adviser is Erik Penser Bank AB
Follow us on <https://eucaps.com/ziccum>

About Ziccum

Ziccum is developing LaminarPace™, a unique ambient drying method for biopharmaceuticals and vaccines based on mass transfer, not heat transfer. The technology is offered by licensing to vaccine and biologics developers and manufacturers in the global pharmaceutical industry. By reducing drying stress to the active ingredient, LaminarPace™ uniquely enables particle-engineered, thermostable dry powder biopharmaceuticals which can be easily handled and transported and are highly suitable for novel administration routes. The technology has been successfully applied to mRNA, peptides, proteins, antibodies, lipids and enzymes as well as excipients and adjuvants, and is well suited for industrial application. Ziccum is listed on the Nasdaq First North Growth Market.

Attachments

[Ziccum AB filing three patent applications as part of new, expanded strategy to strengthen patent protection](#)