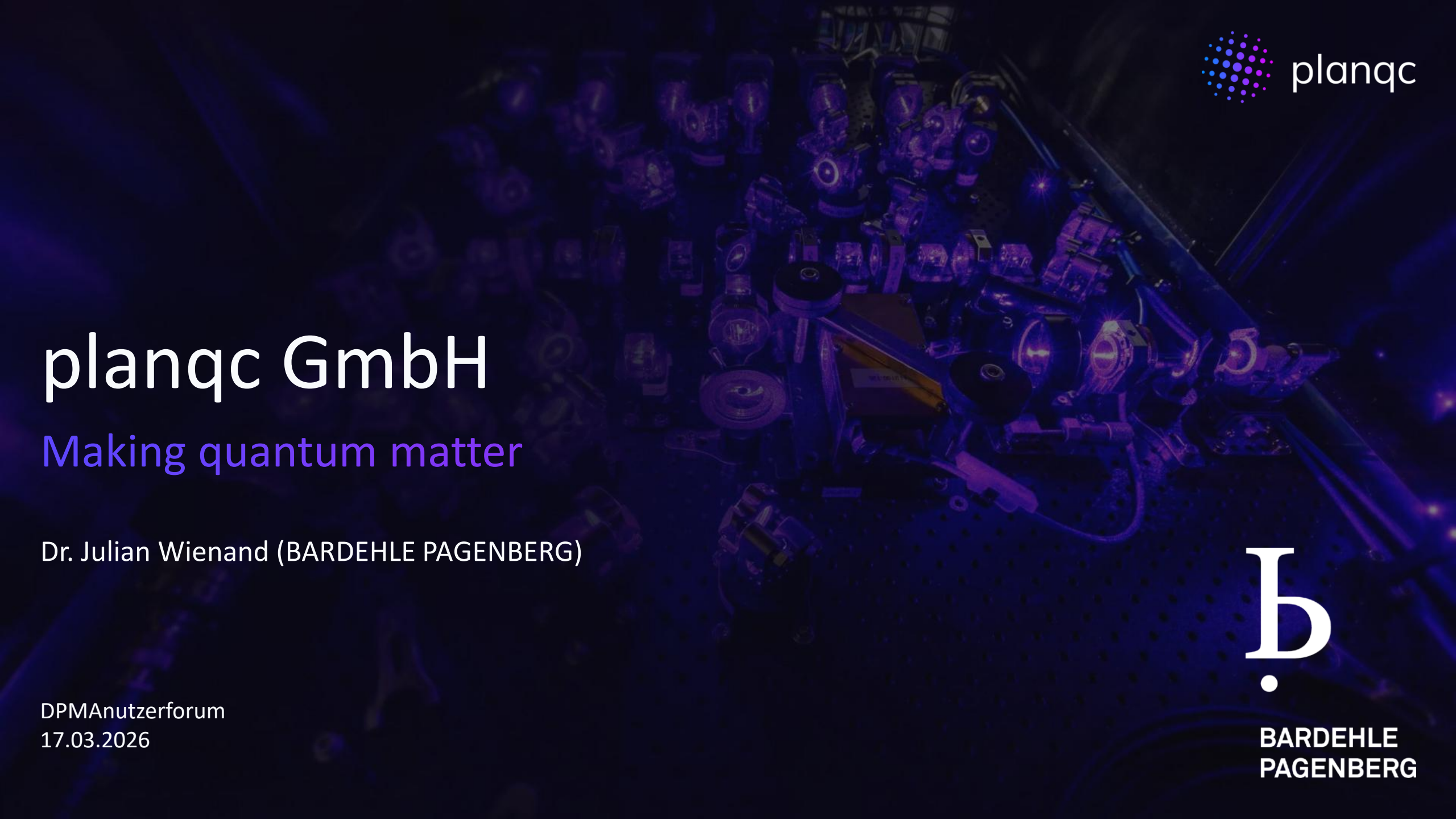


planqc

planqc GmbH

Making quantum matter

Dr. Julian Wienand (BARDEHLE PAGENBERG)

DPMAnutzerforum
17.03.2026

BARDEHLE
PAGENBERG

planqc builds the most scalable neutral-atom quantum computing platform “Made in Germany”

2022
founded in Munich

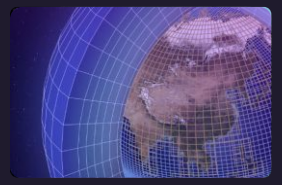
€ 55m
seed and series A

120+
employees



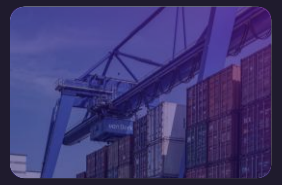
Planqc’s portfolio of quantum use cases

Quantum Machine Learning



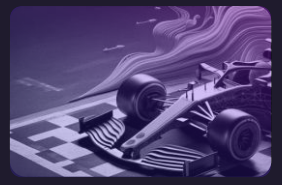
Using QML we reduce climate forecast uncertainties to improve reliable global policy actions.

Logistics Optimization



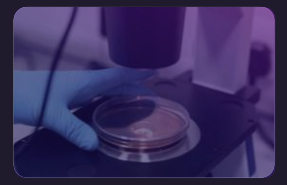
Developing quantum algorithms for solving large-scale optimization problems.

Computational Fluid Dynamics



Developing quantum software to revolutionize fluid dynamics and improve electric vehicles.

Material Simulations



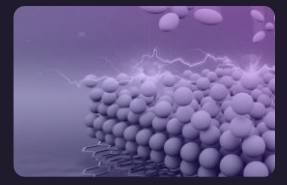
Developing quantum-optimized algorithms for strongly correlated materials.

Finance



Developing quantum algorithms for solving computationally hard financial use cases.

Battery Simulations



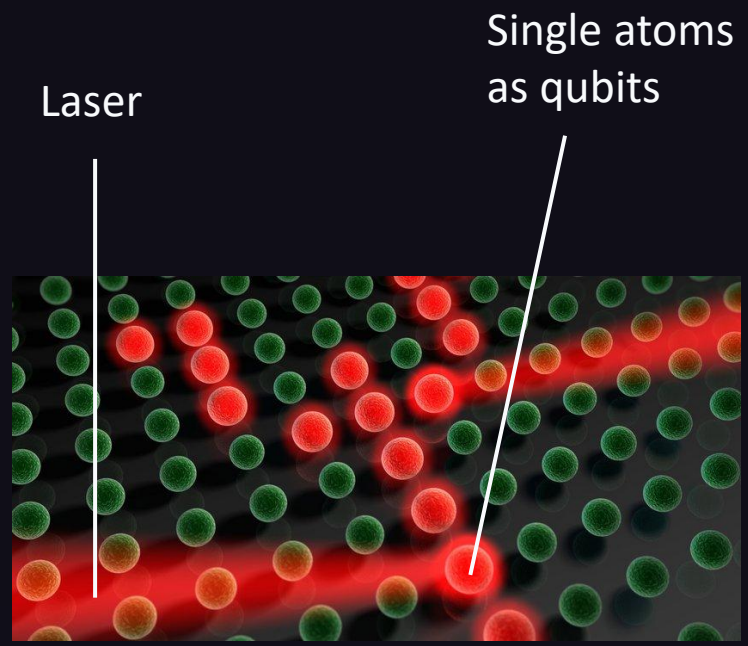
Developing quantum algorithms to improve accuracy of battery charge transport models.

planqc is the first spin-off from the Munich Quantum Valley

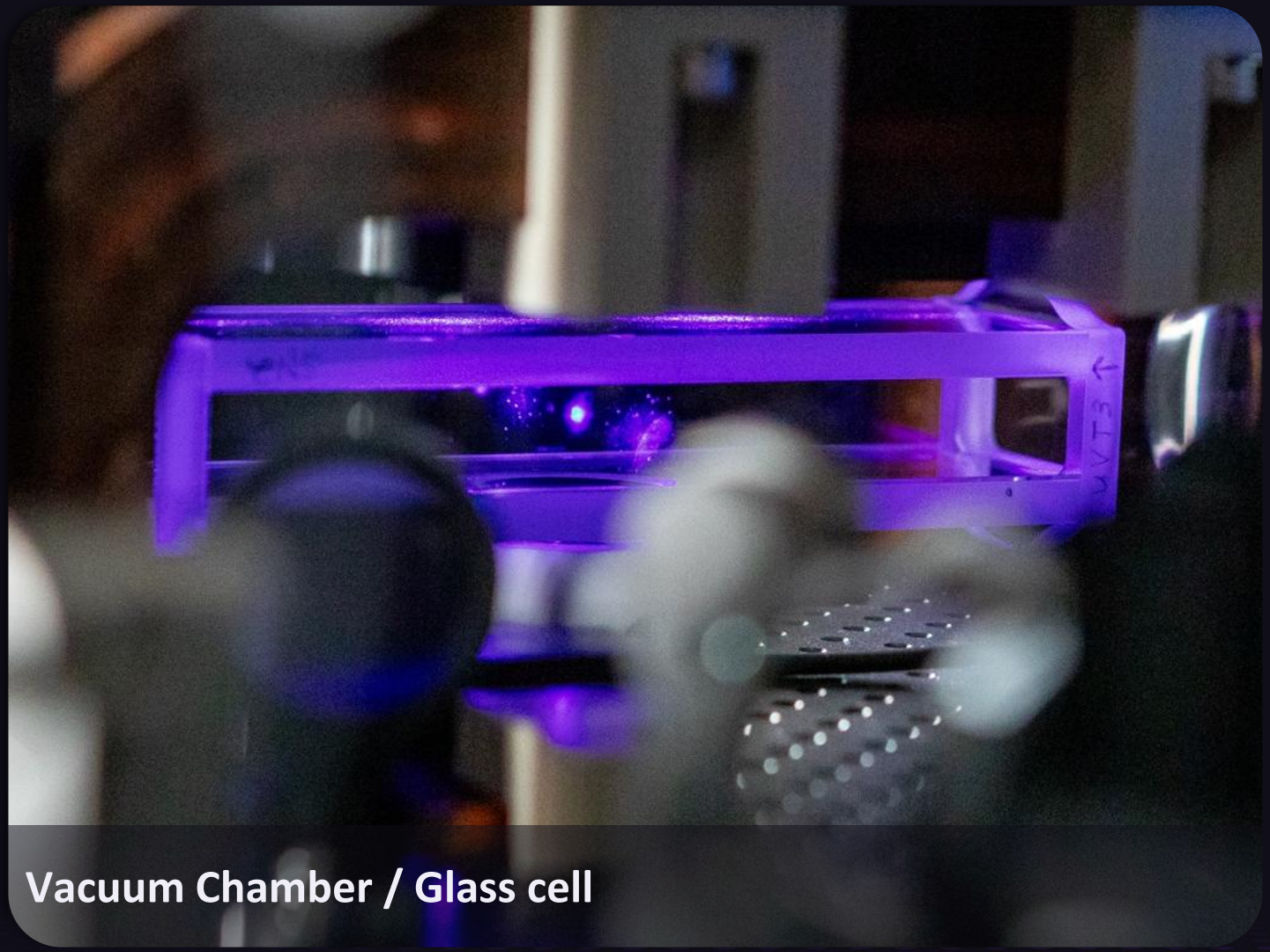
Munich Quantum Valley



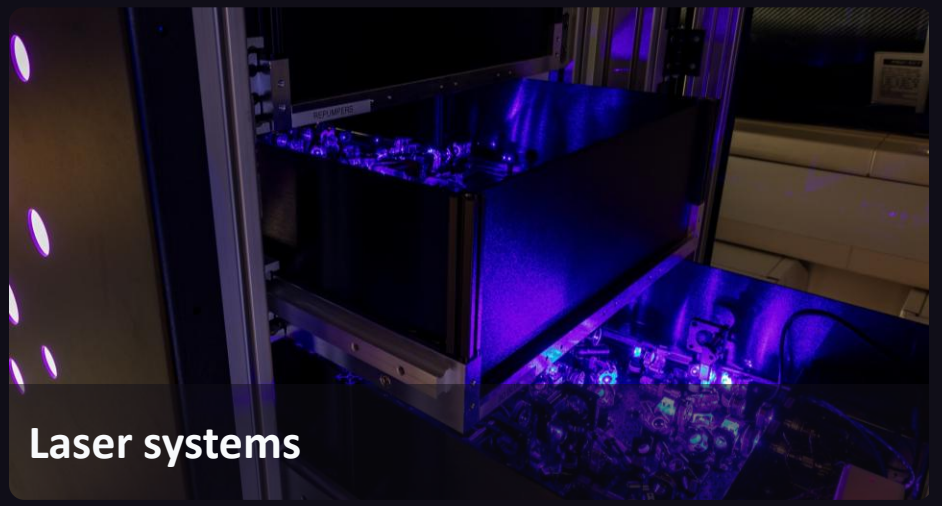
2022
founded in Munich



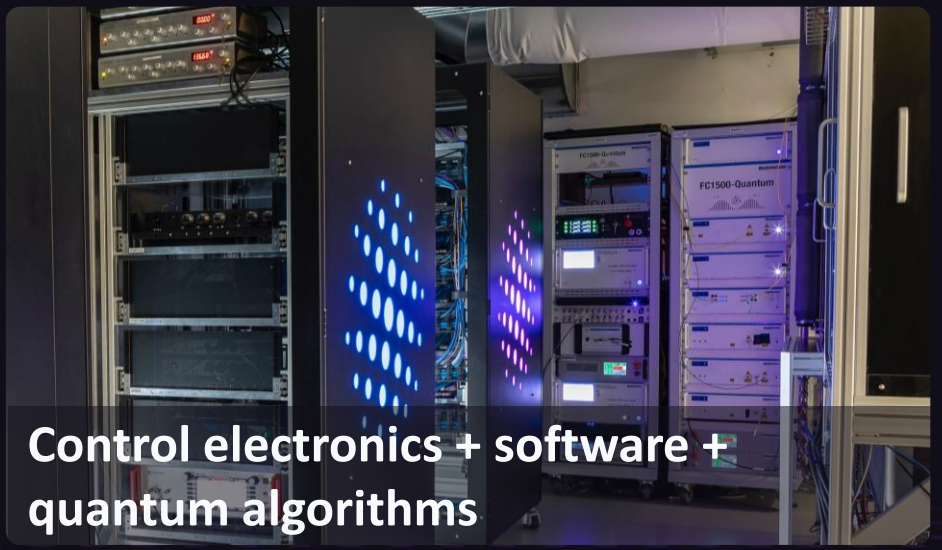
What a real neutral-atom based quantum computer looks like at planqc



Vacuum Chamber / Glass cell



Laser systems



Control electronics + software + quantum algorithms

planqc's IP portfolio

Foundational Tech Patents

e.g. quantum gate schemes, laser manipulation solutions

Patents exclusively licensed from MPG and LMU

MAX PLANCK INSTITUTE OF QUANTUM OPTICS

LMU

+

Own filings

Advanced Tech & Application Patents

e.g. neutral atom transport techniques, quantum error correction protocols, applied quantum algorithms, hardware-efficient implementations

Own filings

Trade secrets

e.g. calibration routines, quantum software libraries, electronics & control software

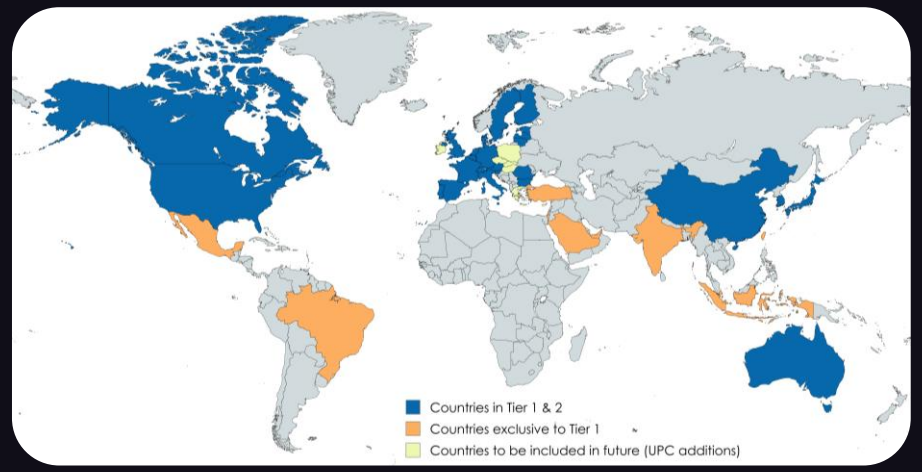
Core IP Principles

#1: “Quality over quantity” to form valuable=enforceable IP portfolio

#2: Global coverage for all inventions

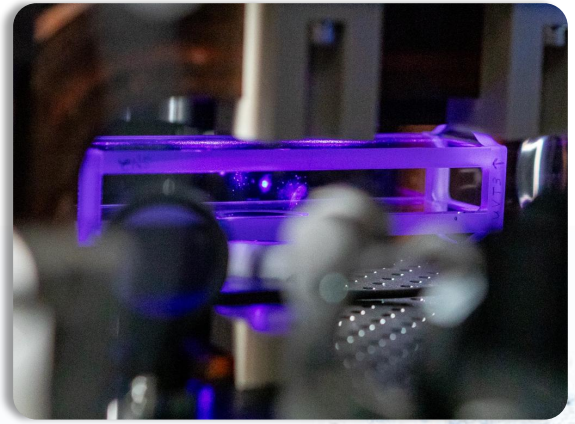
Standard IP: Broad coverage in key markets

Core IP: additional coverage of emerging markets



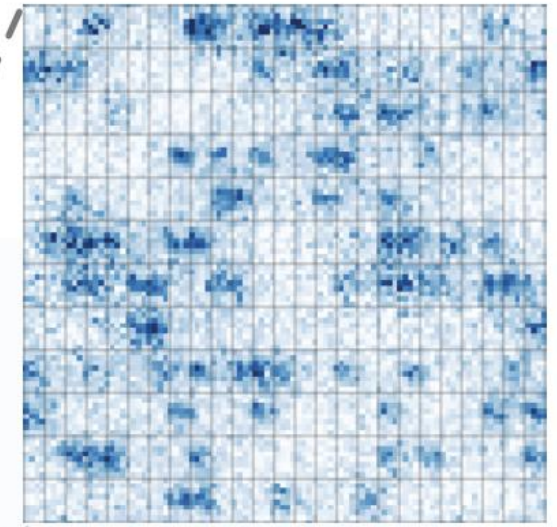
#3: Continuous competitor monitoring and early risk mitigation

- ✓ Preparing invalidity defense
- ✓ Preparing cross-licensing / retaliation
- ✓ Exploring design-arounds



Neutral atom quantum processor

Publication: Phys. Rev. Lett. 133, 013401 (2024)
Patent Application: **PCT/EP2023/074768**



20 µm