LYON, France – September 8, 2016: The growing demand for new devices applied to IoT1, wearable, environmental and implantable sectors is confirmed and directly impacting the development of innovative solutions for microbatteries. “New microbatteries technologies are intimately linked to batteries, microelectronics and nanomaterials fields”, explains KnowMade in its latest report. Indeed new battery technologies, electrodes and electrolytes materials developed for batteries could be adapted to the microbatteries. The door to innovation is now wide open.

Today KnowMade, partner of Yole Développement, proposes a new patent landscape analysis titled Microbattery, dedicated to the microbatteries IP world and taking into account more than 300 patent applicants. Under a booming market in mutation, some players stand out by their IP position, announces KnowMade.

Today micro-sized batteries are only commercialized by few players: PowerPaper, Cymbet, Infinite Power Solutions and ST Microelectronics. In parallel, Johnson Battery Technology, Front Edge Technology and I-Ten are working on prototypes and expect to commercialize them within two years. Competition is fierce and KnowMade’s experts highlight the recent mergers and acquisitions: Apple and Infinite Power Solutions – Dyson and SAKTI3 are part of the numerous examples. Such level of transactions is showing the good performance of the microbatteries market, still under transformation. Moreover market analysts announce a US$ 7 million market in 2015, with a growth to US$ 400 million by 2026…

Under its latest patent landscape analysis, KnowMade brings to light the incredible number of enforceable patents, which has reached a critical level worldwide. The technology intelligence and IP strategy

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1 IoT : Internet of Things
consulting company announces, several companies stand out by their strong IP position and first patent litigations have recently appeared...

“The strong IP position is essential for companies to grow their microbatteries business,” comments Dr Fleur Thissandier from KnowMade. And she adds: “Indeed more than 900 patented inventions related to microbatteries have been published worldwide up to May 2016 by more than 300 patent applications. Such figures reflect the dynamism of the microbatteries market.”

Very active in this field, CEA is still the main patent holder around the world. But according to KnowMade analysis, Cymbet, Polyplus Battery, Infinite Power Solutions and Panasonic have the strongest patent portfolios with a real IP blocking potential.

Moreover microbattery patent analysis from KnowMade provides a ranking and details the relative strength of the top patent holders derived from their patent portfolio size, patent citation networks, countries of patent filings and current legal status of patents and much more.

KnowMade has developed a unique understanding of patent and scientific information that enables the patent analysis company to accurately analyze IP and research findings. Today, it is crucial to understand the global patent landscape in order to anticipate changes, harvest business opportunities, mitigate risks and make strategic decisions to strengthen one’s market position and maximize return on one’s IP portfolio. “At KnowMade, we strongly believe there are strategic information for business development into patents and scientific communications,” explains Dr Nicolas Baron, Founder & CEO from KnowMade “Our daily challenge is to highlight opportunities and threats likely to alter our clients’ business growth...”
About the Microbattery Patent Analysis report from KnowMade, partner of Yole Développement
A starting market attracting many players from various industries. Who owns the key patents?
For more information on these reports, please contact David Jourdan - Phone: +33 472 83 01 90

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- **Dr Fleur Thissandier** works for KnowMade in the field of Microelectronics and Chemistry. She holds a PhD in Chemistry of Materials and Electrochemistry from CEA/INAC, Grenoble, France. She also holds a Chemistry Engineering Degree from the Superior National School of Chemistry (ENSCM), Montpellier, France.

- **Dr Nicolas Baron** is CEO and co-founder of Knowmade. He leads the Physics Department. He holds a PhD in Physics from the University of Nice Sophia-Antipolis, plus a University Diploma in Intellectual Property Strategy and Innovation from the European Institute for Enterprise and Intellectual Property (IEEPI Strasbourg), France.

Companies listed:


About KnowMade - www.knowmade.com
Knowmade is a Technology Intelligence and IP Strategy consulting company specialized in analysis of patents and scientific information. The company supports R&D organizations, industrial companies and investors in their business development by helping them to understand their IP environment and follow technology trends. Knowmade is involved in Microelectronics & Optoelectronics, Compound Semiconductors, IC Manufacturing & Advanced Packaging, Power & RF Devices, MEMS & Sensors, Photonics, Micro & Nanotechnology, Biotech/Pharma, MedTech & Medical Devices. Knowmade provides Prior art search, Patent Landscape Analysis, Patent Valuation, Freedom-to-Operate Analysis, Litigation/Licensing support, Scientific Literature Landscape, Technology Scouting and Technology Tracking. Knowmade combines information search services, technology expertise, powerful analytics tools and proprietary methodologies for analyzing patents and scientific information. Knowmade’s analysts have an in-depth knowledge of scientific & patent databases and Intellectual Property. Contact: Nicolas Baron, Founder & CEO (nicolas.baron@knowmade.fr)

About Yole Développement - www.yole.fr
Founded in 1998, Yole Développement has grown to become a group of companies providing marketing, technology and strategy consulting, media and corporate finance services. With a strong focus on emerging applications using silicon and/or micro manufacturing, Yole Développement has expanded to include more than 50 employees working worldwide in MEMS, Compound Semiconductors, LED, Image Sensors, Optoelectronics, Microfluidics & Medical, Advanced Packaging, Manufacturing, Nanomaterials, Power Electronics and Batteries & Energy Management.

The “More than Moore” company Yole and its partners, System Plus Consulting, Blumorpho and KnowMade, support industrial companies, investors and R&D organizations worldwide to help them understand markets and follow technology trends to grow their business.

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