KNY DESIGN
AUSTRIA

Press release

„ILE“: Electricity flows through the air

Kny Design presents new technology for wireless power transfer at international trade fair in Frankfurt, Germany.

(Ramingdorf, 27 March 2014) ILE is an abbreviation for „Inductive Light Efficiency“. Inductive – and thus wireless – power transfer offers an entirely new range of possibilities and applications in the field of lighting design. „The idea of wireless power transfer is more than 150 years old, but the practical implementation has only become possible recently“, CEO and technology developer Harald Kny reports. „For a few years it has been possible to charge electric toothbrushes and mobile phones with 5W punctiform power transfer. We have now developed a system that is able to transfer power with higher energy not only in a punctiform, but also in a linear manner.“

This has the following advantages: Light elements illuminated with LED can be mounted to a rail system at any position and are supplied with wireless power. The positions of the light elements can re-arranged at any time, thus producing entirely new illumination patterns. This milestone in lighting technology will be presented to an international expert audience at the „Light + Building“ 2014 trade fair in Frankfurt, Germany, with a candelabra designed by CEO Harald Kny.

Harald Kny is already looking ahead: „The lighting solution presented in Frankfurt is only the beginning of this innovation. There will be surface-mounted and flush-mounted rails for walls, which can be mounted on the wall beneath the ceiling, similar to picture mouldings. This rail system can then be used, for example, to hang illuminated pictures on the wall at any position, without having to install cables in the wall.“ The family-owned business Kny Design, based in the Austrian province of Lower Austria, has come a giant step closer to a wireless future. Kny products with wireless power transfer will soon be available for furniture, walls and floors.

The history of inductive power transfer

The idea for wireless power transfer without cables dates back more than 100 years. Since Michael Faraday discovered electromagnetic induction in 1831 it has been known that wireless power transfer is possible. It then took more than 150 years, until this basic principle could be practically implemented. In 1888 Nikola Tesla developed the alternating current system for which he was also awarded a patent. Preoccupied with the idea of wireless energy transfer with high-frequency alternating currents for his whole life, he did not succeed in implementing his idea in practice before his death.

INNOVATIVE LÖSUNGEN IM LICHTDESIGN | VERWIRKLICHUNG VON IDEEN IN METALL UND GLAS

Kny Design GmbH, Ramingdorf 23, 4441 Behamberg, Austria; Inhaber und Geschäftsführer: Harald Kny
T. +43 7252 81414, Fax +43 7252 81414 75, office@kny-design.com, www.kny-design.com UID: ATU64779715, FN 324495z, Gericht BG Haag

KNY DESIGN
AUSTRIA

Modern pioneers in the field of wireless power transfer include the physicists Andre Kurs and Marin Soljacic, who both work at the MIT (Massachusetts Institute of Technology). They developed „WiTricity", a wireless power transfer technology which can transfer 100W in the laboratory over a distance of one meter. In Germany intensive research is currently conducted at the Fraunhofer Institute to develop this technology further, for example for the wireless charging of batteries of electric cars.

Wireless charging of electric toothbrushes and mobile phones has been possible for some years. In 2008 the „Wireless Power Consortium" was founded with the aim to develop a universal standard for wireless energy transfer to charge electronic devices. Numerous industrial enterprises are members of this consortium. The so-called „QI" standard regulates 5W punctiform power transfer. Even though research and development are making rapid progress in this field, there are few practical solutions for consumers apart from a few specific industrial applications and the possibility of charging toothbrushes and mobile phones.

Kny design now combines this „new old technology" with applications in lighting technology and lighting design. The innovative Austrian company does not use the available standards for 5W; the company's R&D team conducts research into and developed its own electronics and provides new applications and solutions for consumers with „ILE – Inductive Light Efficiency".

(End)

Further information and images available online under:
www.kny-design.com/press.html
Photos may be reproduced free of charge with copyright notice!

Image description (Renderings):
Wireless power supply is the solution: Light elements illuminated with LED can be mounted to a rail system at any position, freely moved and arranged

Image description (Portrait Harald Kny):
CEO and technology developer Harald Kny

Kny Design GmbH, Ramingdorf 23, 4441 Behamberg, Austria; Inhaber und Geschäftsführer: Harald Kny
T. +43 7252 81414, Fax +43 7252 81414 75, office@kny-design.com, www.kny-design.com UID: ATU64779715, FN 324495z, Gericht BG Haag

KNY DESIGN
AUSTRIA

About Kny Design GmbH

Established in 1956 under the name „Bruno Kny & Sohn", with headquarters in Ramingdorf in the Austrian province of Lower Austria, the company specializes in innovative solutions for lighting design. The core competencies of the family-owned business, which is today run by the third generation of the Kny family, are lighting design, glass design and metal construction. The company has about 50 employees, an annual turnover of almost 6m euro and an export rate of 70 percent, the main export markets being Germany, the Arab world, Russia, China and India.
www.kny-design.com

Press contact, inquiries:

Franz Zuckriegl, MBA
Kny Design Corporate Communications
M.+43 699 100.33.816
fz@21stchannels.com

Contakt Kny Design:

Kny Design GmbH
Franz J. Fuka
Ramingdorf 23
A 4441 Behamberg
T. +43 7252 81414-33
franz.fuka@kny-design.com
www.kny-design.com