High-powered femtosecond lasers break through

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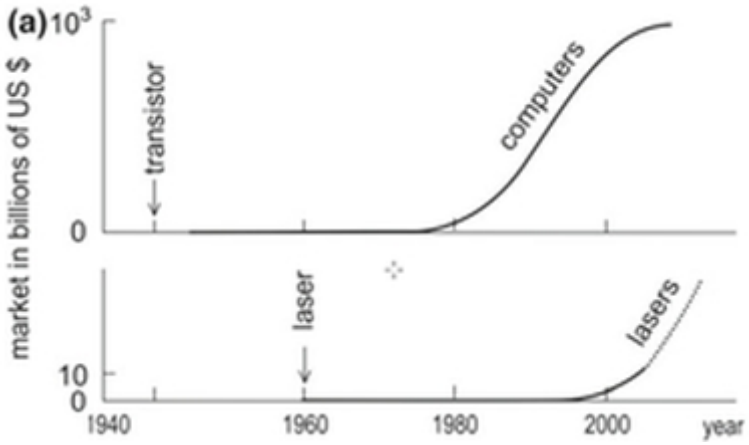
Olivier Malek

Thanks to the ongoing evolution of laser technology, the application possibilities are steadily expanding. This is no different with femtosecond laser technology.

Since the development of the first laser in 1960, it has taken some 40 years for the technology to break through. There used to be a time without lasers, but today the laser is found in many companies for many processes, including cutting, welding, etc. However, that's not the end of it. Laser technology is not standing still. Lasers with new properties as well as their peripheral equipment are being prepared for industrial applications.

Femtosecond laser technology is one such technique. This ultra-short pulsed laser opens up a new field of high quality surface treatment that cannot be achieved with traditional pulsed (nano and pico) lasers. Today, they are already being used in the medical world, including for cataract treatments.

It took a while for the power of these lasers to reach the >100 W domain, so that larger surfaces can be treated with them or more material removed. The fact that these lasers are commercially available today means the time has finally come. It's therefore expected that this technology will be found in new products and applications within a few years.



Similarity in the course between semiconductor and laser business

Want to know more about the possibilities with femtosecond laser technology? Then please contact us !

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Source

Basics of laser physics, Karl F. Renk, ISBN 978-3-319-50650-0, springer verlag 2017

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