

Title (en)

DEVICE AND METHOD FOR PROCESSING ELECTRIC CIRCUIT SUBSTRATES BY LASER

Title (de)

VORRICHTUNG UND VERFAHREN ZUR BEARBEITUNG VON ELEKTRISCHEN SCHALTUNGSSUBSTRATEN MITTELS LASER

Title (fr)

DISPOSITIF ET PROCEDE POUR TRAITER AU LASER DES SUBSTRATS DE COMMUTATION ELECTRIQUE

Publication

EP 1594651 A1 20051116 (DE)

Application

EP 03785671 A 20031126

Priority

- EP 0313314 W 20031126
- DE 10307309 A 20030220

Abstract (en)

[origin: US2004164057A1] For processing electric circuit substrates, a laser source with a diode-pumped, quality-controlled, pulsed solid-state laser is used. The laser is able to emit laser radiation with a wavelength between 266 nm and 1064 nm, a pulse repetition rate between 1 kHz and 1 MHz and a pulse length of 30 ns to 200 ns with an average laser power between 1 W and around 5 W. Pre-specified operating modes can be set via a controller, depending on an area of application, with the appropriate different combinations of laser power and repetition rate. Thus, the same laser can optionally be used to perform a drilling operation, an etch removal operation or an exposure operation. Using a galvo mirror deflector unit that can also be controlled via the deflection unit, the laser beam may be deflected on the substrate in accordance with the relevant operating mode.

IPC 1-7

B23K 26/38; **H05K 3/00**

IPC 8 full level

B23K 26/38 (2006.01); **H05K 3/00** (2006.01)

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Citation (search report)

See references of WO 2004073917A1

Designated contracting state (EPC)

DE FR GB

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