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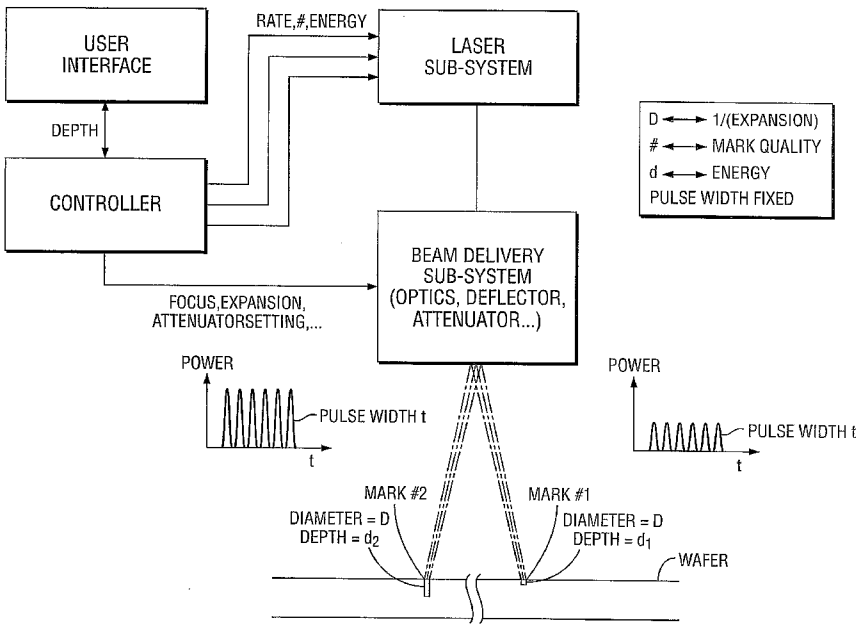
Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

[Continued on next page]

(54) **Title:** METHOD AND SYSTEM FOR LASER HARD MARKING



(57) **Abstract:** A method and system for laser hard marking is provided. The lasermarking system produces a hard mark on a semiconductor wafer. The system includes a pulsed laser subsystem that produces a pulsed laser output for marking at a location on the wafer. The pulsed laser subsystem is controlled so that output pulse width remains substantially constant with a variation in at least one of pulse repetition rate and output energy over a range. A beam delivery system delivers the pulsed laser output to the location on the wafer.

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