

Title (en)
PASSIVELY MODE-LOCKED SEMICONDUCTOR LASER

Title (de)
PASSIV-MODENGEKOPPELTER HALBLEITERLASER

Title (fr)
LASER SEMI-CONDUCTEUR A MODES BLOQUES PASSIVEMENT

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Application
EP 00919427 A 20000317

Priority
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Abstract (en)
[origin: WO0055950A1] A miniature ultra-short light pulse source is based on a passively mode-locked semiconductor laser, including a multisegment laser diode (LD) with controllable saturation in absorbing sections(s) and anti-reflection coating on one of its facets, which is used as an active element. A single-mode optical fiber with a Bragg grating (FBG) written into its core is used as an external cavity. Depending on FBG reflectivity spectrum, the device emits a regular train of transform-limited ps-length pulses or linearly chirped ps-length pulses suitable for a time-compression technique.

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IPC 8 full level
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