

Title (en)  
SOLID STATE LASER WITH HERMETICALLY SEALED PUMP DIODES

Title (de)  
FESTKÖRPERLASER MIT HERMETISCH ABGESCHLOSSENEN PUMPDIODEN

Title (fr)  
LASER A ETAT SOLIDE AVEC DIODES DE POMPE FERMEES HERMETIQUEMENT

Publication  
**EP 1719221 A1 20061108 (EN)**

Application  
**EP 04818061 A 20041221**

Priority  
• US 2004042945 W 20041221  
• US 74927803 A 20031231

Abstract (en)  
[origin: WO2005067112A1] A module for a solid-state laser module includes a laser diode array adapted to pump optical radiation, a heat exchanger coupled to the laser diode array, a coolant manifold that is formed in part through the heat exchanger and is capable of supplying pressurized cooling fluid to the heat exchanger, a hermetic enclosure that has an interior portion in which the laser diode array, the heat exchanger, and the laser gain medium are enclosed, and is adapted to allow for pressurization of the interior portion at a level at least as high as the pressurized cooling fluid, and a pressurant supply line extending through the hermetic enclosure to pressurize the interior portion. The module may also include a laser gain medium that is adapted and positioned to receive the optical radiation to produce an amplified laser beam from an incident laser beam.

IPC 8 full level  
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CPC (source: EP)  
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Citation (search report)  
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