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[Continued on next page]

(54) Title: BLUE LD PUMPED PRASEODYMIUM DOPED SOLID STATE LASER DEVICE WITH REDUCED TEMPERATURE DEPENDENCE

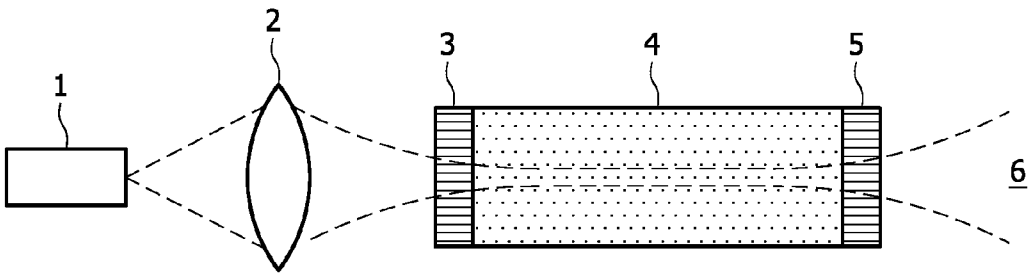

FIG. 5

(57) Abstract: The present invention relates to a solid state laser device with a solid state gain medium between two resonator end mirrors (3, 5) and a GaN-based pump laser (1) arranged to optically pump the solid state gain medium. The solid state gain medium is a Pr^{3+}-doped crystalline or polycrystalline host material (4) which has a cubic crystalline structure and highest phonon energies of $\leq 600\ cm^{-1}$ and provides a band gap of $\geq 5{,}5$ eV. The proposed solid state laser can be designed to emit at several visible wavelengths with the emitted power showing a reduced dependence on the temperature of the GaN-based pump laser (1).

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ADD. H01S3/23 H01S3/063

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	WO 2005/117216 A (MELLES GRIOT INC [US]; TAKEUCHI ERIC B [US]; HARGIS DAVID E [US]) 8 December 2005 (2005-12-08) paragraphs [0049] - [0068]; figures 2-5	1-3,6,8, 9 4,5,7, 10-12
Y	WO 2006/109730 A (MATSUSHITA ELECTRIC IND CO LTD [JP]; MIZUUCHI KIMINORI; YAMAMOTO KAZUH) 19 October 2006 (2006-10-19) for references see family member US-A-2009/067 453 -& US 2009/067453 A1 (MIZUUCHI KIMINORI [JP] ET AL) 12 March 2009 (2009-03-12) paragraphs [0157] - [0199], [0220] - [0224], [0248], [0249], [0288] - [0291]; figures 1-8,11,20	1-6,8-12

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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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