

Title (en)

PREPARATION OF TRANSPARENT CERAMICS OF YAG DOPE BY LANTHANIDES

Title (de)

VORBEREITUNG DER TRANSPARENTEN KERAMIK VON YAG-DOTIERUNG MITTELS LANTHANIDEN

Title (fr)

PREPARATION DE CERAMIQUES TRANSPARENTES DE YAG DOPE PAR DES LANTHANIDES

Publication

EP 1732863 A1 20061220 (FR)

Application

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Abstract (en)

[origin: WO2005100281A1] The invention relates to a method for preparing a transparent ceramic material based on an intermetallic oxide, comprising the following steps: (A) particles (p) based on said intermetallic oxide are synthesised by oxidising calcination of particles (p0) containing a homogeneous mixture of organic salts of different metallic cations of the intermetallic oxide; (B) a moulded material (M) is produced from the particles (p) obtained in this way, using a filtering pressing technique; and (C) the moulded material (M) is thermally processed (sintered). The invention also relates to the materials based on transparent oxides obtained according to said method, especially the transparent ceramic materials based on Y3Al5O12 (YAG) doped by lanthanides such as neodymium, and to the uses of said materials, especially for laser amplification.

IPC 8 full level

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Citation (search report)

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