

Title (en)

Process for producing single crystal of yttrium-iron garnet solid solution.

Title (de)

Verfahren zur Herstellung eines Einkristalls, der aus einer festen Lösung von Yttrium-Eisen Granaten besteht.

Title (fr)

Procédé de fabrication d'un monocristal d'une solution solide de grenat de fer et d'yttrium.

Publication

EP 0000720 A1 19790221 (EN)

Application

EP 78100474 A 19780721

Priority

- JP 9541677 A 19770809
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Abstract (en)

[origin: US4256531A] A single crystal of yttrium-iron garnet or solid solution comprising aluminum oxide component, gallium oxide component, iron oxide and/or the other rare earth oxide component is produced by a floating zone method.

IPC 1-7

B01J 17/14; **C04B 35/00**

IPC 8 full level

C30B 13/00 (2006.01); **C30B 13/02** (2006.01)

CPC (source: EP US)

C30B 13/00 (2013.01 - EP US); **C30B 13/02** (2013.01 - EP US); **C30B 29/28** (2013.01 - EP US)

Citation (search report)

- [A] US 3444084 A 19690513 - GELLER SEYMOUR, et al
- [A] FR 2138232 A1 19730105 - LABO ELECTRONIQUE PHYSIQUE
- [X] JOURNAL OF APPLIED PHYSICS, vol. 32, no. 3, March 1961, L.L. ABERNETHY et al.: "Growth of Yttrium Iron Garnet Single Crystals by the Floating Zone Technique", pages 376s to 377s
- [P] JOURNAL OF CRYSTAL GROWTH, vol. 41, no. 2, December 1977, S. KIMURA et al.: "Single crystal growth of YIG by the floating zone method", pages 192 to 198

Cited by

EP0864669A3; EP0796931A1; US6033470A; US6063304A

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DOCDB simple family (publication)

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