

Title (en)
SPECTRAL SPREADING AND CONTROL DEVICE FOR HIGH PEAK POWER PULSE LASERS

Title (de)
SPEKTRALSPREIZUNGS- UND STEUEREINRICHTUNG FÜR IMPULSLASER MIT HOHER SPITZENLEISTUNG

Title (fr)
DISPOSITIF D'ETIREMENT ET DE CONTROLE SPECTRAL POUR LASERS IMPULSIONNELS A FORTE PUISSANCE CRETE

Publication
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Application
EP 07787399 A 20070711

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• FR 0606309 A 20060711

Abstract (en)
[origin: WO2008006863A1] The invention relates to a spectral spreading and control device for high peak power pulse lasers, which does not limit the extraction yield for amplifiers in the CPA amplifier in which the above is included. The invention is characterised in comprising an acousto-optical device for dispersing light pulses with programmable spectral amplitude arranged in a multi-pass amplifier (12).

IPC 8 full level
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H01S 3/0057 (2013.01 - EP US); **H01S 3/235** (2013.01 - EP US); **G02F 1/33** (2013.01 - EP US); **H01S 3/0064** (2013.01 - EP US);
H01S 3/1625 (2013.01 - EP US); **H01S 3/1636** (2013.01 - EP US); **H01S 3/2325** (2013.01 - EP US)

Citation (search report)
See references of WO 2008006863A1

Citation (examination)
• LE BLANC C. ET AL.: "Contrôle de l'amplitude et de la phase spectrale sur la chaîne 100TW du LULI", RAPPORT D'ACTIVITÖ LULI 2000, E7, 2001, pages 134 - 137, Retrieved from the Internet <URL:http://www.luli.polytechnique.fr/rapports/rapport00/pdf/e7.pdf> [retrieved on 20101118]
• PITTMAN M. ET AL: "Design and characterization of a near-diffraction-limited femtosecond 100-TW 10-Hz high-intensity laser system", APPLIED PHYSICS B: LASERS AND OPTICS, vol. 74, 14 May 2002 (2002-05-14), pages 529 - 535, Retrieved from the Internet <URL:http://www.springerlink.com/content/ra7ah4736e9gk5cy/fulltext.pdf> [retrieved on 20101118], DOI: 10.1007/S003400200838
• OKSENHENDLER T. ET AL: "Intracavity acousto-optic programmable gain control for ultra-wide-band regenerative amplifiers", APPLIED PHYSICS B, vol. 83, no. 4, 5 May 2006 (2006-05-05), pages 491 - 494, XP019424545, ISSN: 1432-0649

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