Title (en)

SYSTEM FOR CONTINUOUSLY GENERATING POLYCHROMATIC LIGHT BY MEANS OF DOPED MICROSTRUCTURED OPTICAL FIBRE.

Title (de)

SYSTEM ZUR KONTINUIERLICHEN ERZEUGUNG VON POLYCHROMATISCHEM LICHT DURCH DOTIERTE MIKROSTRUKTURIERTE GLASFASERN

Title (fr)

SYSTEME DE GENERATION D'UNE LUMIERE POLYCHROMATIQUE EN REGIME CONTINU PAR FIBRE OPTIQUE MICROSTRUCTUREE DOPEE.

Publication

EP 2491628 A2 20120829 (FR)

Application

EP 10785481 A 20101020

Priority

- FR 0905092 A 20091022
- FR 2010052234 W 20101020

Abstract (en)

[origin: WO2011048329A2] The present invention relates to a system (1) for generating polychromatic light, including: an optical pumping means (2) suitable for continuously or quasi-continuously emitting monochromatic or quasi-monochromatic radiation (3) according to a pumping wavelength (?p); a means (6) for guiding light arranged such as to emit polychromatic radiation (7), continuously or quasi-continuously, at the output thereof; and a means (4) for coupling between the pumping (2) and coupling means (6). In said system, the guiding means (6) includes a microstructured optical fibre (6) in which the core (6c) is at least partially doped with a material (6b) having a high intrinsic non-linear response, and the geometry of said optical fibre (6) and the doping rate (N) of the core thereof (6c) are predetermined such as to adapt the zero dispersion length (?dn) of said optical fibre (6) to the pumping wavelength (?p).

IPC 8 full level

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CPC (source: EP US)

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See references of WO 2011048329A2

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