

Title (en)

OPTICAL ROTARY JOINT WITH HIGH RETURN LOSS

Title (de)

OPTISCHER DREHÜBERTRAGER MIT HOHER RÜCKFLUSSDÄMPFUNG

Title (fr)

TRANSFORMATEUR DE ROTATION OPTIQUE AVEC UN AFFAIBLISSEMENT DE RETOUR ÉLEVÉ

Publication

EP 2104875 A1 20090930 (DE)

Application

EP 07857080 A 20071221

Priority

- EP 2007011373 W 20071221
- DE 102006062335 A 20061222

Abstract (en)

[origin: WO2008077624A1] The invention relates to an optical rotary joint comprising a first collimator arrangement for coupling first optical fibers and a second collimator arrangement for coupling second optical fibers, wherein the second collimator arrangement is mounted in such a way that it can rotate about a rotational axis relative to the first collimator arrangement. Between the collimator arrangements, a Dove prism is provided as a derotating element. On at least one boundary surface between an optical element and the surroundings, an intermediate layer is provided which comprises a nanostructure having an average refractive index lying between the refractive index of the material of the microoptical system and the refractive index of the surrounding medium.

IPC 8 full level

G02B 6/36 (2006.01)

CPC (source: EP US)

G02B 5/04 (2013.01 - EP US); **G02B 6/3604** (2013.01 - EP US)

Citation (search report)

See references of WO 2008077624A1

Citation (examination)

US 2006024018 A1 20060202 - PIEHL ARTHUR R [US], et al

Cited by

US9804335B2; EP3182180A1

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