

Title (en)
NON-LINEAR OPTICAL STACKS

Title (de)
NICHTLINEARE OPTISCHE LAGENSTRUKTUR

Title (fr)
PILES OPTIQUES NON LINEAIRES

Publication
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Application
EP 02765070 A 20021002

Priority
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• GB 0123742 A 20011003

Abstract (en)
[origin: WO03029893A2] A non-linear optical device such as a frequency changer, parametric amplifier or mixer comprises a stack of grating layers (1, 2, 3) of non-linear optical material. Each grating layer comprises at least one grating (5) and is bonded in spaced relation to adjacent grating layers (4), preferably by a glass consisting essentially of germanium, arsenic, selenium and a relatively high proportion of tellurium. As described, the gratings (5) in a layer are spaced and formed by periodic electrical poling. The periodicity in adjacent layers may be the same or different. The layers may be of material useful in the infra-red. The layers may be formed of GaAs, ZnSe, ZnGeP₂, lithium niobate, potassium, titanyl phosphate or rubidium titanyl arsenate.

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CPC (source: EP)
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See references of WO 03029893A2

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