

Title (en)  
OPTICAL GUIDE COMPRISING NANOPARTICLES AND METHOD OF PRODUCING A PREFORM WHICH IS INTENDED TO FORM ONE SUCH OPTICAL GUIDE

Title (de)  
OPTISCHE FÜHRUNG MIT NANOPARTIKELN UND VERFAHREN ZUR HERSTELLUNG EINER VORFORM, DIE EINE SOLCHE OPTISCHE FÜHRUNG BILDEN SOLL

Title (fr)  
GUIDE OPTIQUE COMPRENANT DES NANOPARTICULES ET PROCEDE DE FABRICATION D'UNE PREFORME DESTINEE A FORMER UN TEL GUIDE OPTIQUE

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Application  
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Abstract (en)  
[origin: WO2007020362A2] The invention relates to an optical fibre comprising a gain medium which is equipped with: a core (22) which is formed from a transparent material and nanoparticles (24) comprising a doping element and at least one element for enhancing the use of said doping element; and an outer sheath (26) which surrounds the core. The invention is characterised in that the doping element is erbium (Er) and in that the enhancing element is selected from among antimony (Sb), bismuth (Bi) and a combination of antimony (Sb) and bismuth (Bi). According to the invention, one such fibre is characterised in that the size of the nanoparticles is variable and included between 1 and 500 nanometers and preferably greater than 20 nm.

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Citation (search report)  
See references of WO 2007020362A2

Cited by  
EP2187486A1; US8259389B2

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