

Title (en)

DEVICE FOR CASCADING OPTICAL AMPLIFIERS

Title (de)

VORRICHTUNG ZUM HINEREINANDERSCHALTEN OPTISCHER VERSTARKER

Title (fr)

SYSTEME D'AMPLIFICATEURS OPTIQUES EN CASCADE

Publication

EP 0873540 A1 19981028 (EN)

Application

EP 96929613 A 19960820

Priority

- SE 9601029 W 19960820
- SE 9502960 A 19950825

Abstract (en)

[origin: WO9708585A1] Generation of optical pulses having very high peak power. In many applications it is desirable to be able to use pulses having a very high peak level (> 1 kW). A simple method to generate them would be to simply connect optical amplifiers in cascade. However, it can not be made, since each amplifier generates noise, which together with possible signal residues between the pulses can saturate successive amplifiers. This problem has been solved by arranging an element having a non linear transmission between the amplifiers. This element can be constituted of a non linear loop mirror, a saturable absorber or a semiconductor laser amplifier. The loop mirror has today the best performance and can be implemented passively and at a low cost.

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G02F 1/39; H04B 10/17

IPC 8 full level

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CPC (source: EP)

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