

Title (en)

MONOLITHIC PULSE COMPRESSOR AND ASSOCIATED ADJUSTMENT METHOD

Title (de)

MONOLITHISCHER PULSKOMPRESSOR UND ZUGEHÖRIGES JUSTAGEVERFAHREN

Title (fr)

COMPRESSEUR D'IMPULSIONS MONOLITHIQUE ET PROCÉDÉ D'AJUSTEMENT ASSOCIÉ

Publication

EP 3994772 A1 20220511 (DE)

Application

EP 20734688 A 20200622

Priority

- DE 102019209649 A 20190702
- EP 2020067284 W 20200622

Abstract (en)

[origin: WO2021001185A1] In a pulse compressor (1) having a plurality of optical components (2-4), at least one of which is a diffraction grating (3), according to the invention at least one of the optical components (2-4) is fastened to the base plate (6) by means of at least three intermediate elements (5a-5c) which are laser-welded to one another, a first and a second intermediate element (5a, 5b) being fastened to the base plate (6) and a third intermediate element (5c) being fastened to the optical component (2-4). The joint surfaces (7b) of the first and the second intermediate element (5a, 5b) abutting the third intermediate element (5c) and the joint surface (8b) of the third intermediate element (5c) abutting the first and the second intermediate element (5a, 5b) are curved. At least the laser-welded joint surfaces of the at least one optical component (2-4), of the intermediate elements (5a-5c) and of the base plate (6) are formed from materials in which the difference between their coefficients of thermal expansion is less than 10e-6/K.

IPC 8 full level

H01S 3/00 (2006.01); **G02B 7/00** (2021.01)

CPC (source: CN EP US)

B23K 26/21 (2015.10 - US); **G02B 7/003** (2013.01 - EP US); **G02B 7/008** (2013.01 - EP); **H01S 3/0014** (2013.01 - EP); **H01S 3/0057** (2013.01 - CN EP); **H01S 3/06712** (2013.01 - CN); **H01S 3/08036** (2013.01 - CN); **H01S 3/1106** (2013.01 - CN); **G02B 5/18** (2013.01 - US); **H01S 3/005** (2013.01 - EP); **H01S 3/0057** (2013.01 - US); **H01S 3/0071** (2013.01 - EP); **H01S 3/067** (2013.01 - US); **H01S 3/1106** (2013.01 - US)

Citation (search report)

See references of WO 2021001185A1

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