Title (en)

LASER ARRANGEMENT AND METHOD FOR OPERATING A LASER ARRANGEMENT

Title (de)

LASERANORDNUNG SOWIE VERFAHREN ZUM BETREIBEN EINER LASERANORDNUNG

Title (fr)

SYSTÈME LASER ET PROCÉDÉ PERMETTANT DE FAIRE FONCTIONNER UN SYSTÈME LASER

Publication

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Application

EP 18740115 A 20180625

Priority

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Abstract (en)

[origin: WO2019002229A2] The invention relates to a laser arrangement comprising at least one optical fibre amplifier (5, 6) and to a method for operating said type of laser arrangement in which a pulsed laser beam is generated using a light source (1), the laser beam is sent to an optical fibre amplifier (5, 6), at least one characteristic of the laser beam is detected by the detector (11, 13, 16) and is transmitted to a control unit (15), and in which the control unit (15) generates a control signal based on the characteristic of the laser beam detected by the detector (11, 13, 16), the control signal is transmitted to the fibre amplifier (5, 6) for reacting on the amplification of the pulse energy of the laser beam generated by the fibre amplifier (5, 6), or to an optical switch (4) for modifying a pulse form. The technical solution described is characterized in that an absolute value or a change of a pulse energy, pulse form and/or frequency of the laser beam is detected by the detector (11, 13, 16) as a characteristic, and that the control unit (15) produces a control signal by taking into account a comparison of the detected value with a characteristic value of the pulse energy, pulse form, frequency and/or frequency modification of the laser beam, in which a stimulated Brillouin scattering (20) (SBS) is generated in the laser arrangement.

IPC 8 full level

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