

Title (en)

METHOD AND DEVICE FOR STABILISING THE SPECTRUM OF A PULSED COHERENT OPTICAL SOURCE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR STABILISIERUNG DES SPEKTRUMS EINER GEPUŁSTEN KOHÄRENTEN OPTISCHEN QUELLE

Title (fr)

PROCEDE ET DISPOSITIF POUR STABILISER LE SPECTRE D'UNE SOURCE OPTIQUE COHERENTE PULSEE

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Application

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Abstract (en)

[origin: WO2009103180A2] The invention relates to a method for stabilising the spectrum of a pulsed coherent optical source that comprises controlling the offset frequency Δf and the repetition rate f_r in order to stabilise the frequencies of the comb lines constituting the optical spectrum thereof. The method comprises forming, from the pulsed coherent optical source (S1), a beam that is directed onto a reference resonant optical cavity (CR), and using the signal generated by the reference resonant optical cavity (CR) for controlling the offset frequency Δf or the repetition rate f_r , and probing, using a comb line, an atomic or molecular transition (AMT) in order to generate a driving signal for the repetition rate f_r or the offset frequency Δf .

IPC 8 full level

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