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Patent Number(s): JP2012141473-A

Title: Etalon filter for frequency calibration system to perform frequency calibration of light source in terahertz wave area, has spacer connected to reflecting film of substrates, where space is formed between substrates by joining spacer

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Abstract: NOVELTY - The filter (1) has reflecting films (7, 8) formed in an opposite side of a spacer (4) of two diamond substrates (2, 3). A space is formed between the diamond substrates by joining the spacer. The spacer is connected to the reflecting film of the diamond substrates. The diamond substrates are arranged with an adhesive agent. Anti-reflective films (5, 6) are formed in surfaces of the diamond substrates. The spacer is formed by using a piezo-electric element.

USE - Etalon filter for a frequency calibration system (claimed) to perform frequency calibration of a light source in terahertz wave area.

ADVANTAGE - The spacer is connected to the reflecting film of the diamond substrates, where the space is formed between the diamond substrates by joining the spacer, so that frequency of a terahertz wave can be calibrated without destroying the structure of the etalon filter in an accurate manner.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a frequency calibration system

(2) a frequency calibration method.

DESCRIPTION OF DRAWING(S) - The drawing shows a top view of an etalon filter.

Etalon filter (1)

Diamond substrates (2, 3)

Spacer (4)

Anti-reflective films (5, 6)

Reflecting films (7, 8)

Derwent Class Code(s): P81 (Optics); V07 (Fibre-optics and Light Control); X26 (Lighting - Discharge, incandescent and electric arc lamps)

Derwent Manual Code(s): V07-F02A; X26-D01A

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