

521

Patent Number(s): CN102545056-A

Title: Terahertz quantum cascade laser has surface emitting section which is provided vertical to surface of substrate

Inventor Name(s): CAO J; HAN Y; WAN W

Patent Assignee(s): CHINESE ACAD SCI SHANGHAI MICROSYSYSTEM (CHSC-Non-standard)

Derwent Primary Accession No.: 2012-K50938

Abstract: NOVELTY - The laser has a single-mode generating section (10) and a tapered coupling region (09) which are respectively arranged as a first grating (11). A surface emitting section (08) is arranged as second grating (07). The single-mode generating section generates a terahertz single mode seed light. The tapered coupling region is coupled with the surface emitting section. The surface emitting section is provided vertical to a surface of a substrate (01).

USE - Terahertz quantum cascade laser.

ADVANTAGE - The terahertz quantum cascade laser with high power, narrow line width and small divergence angle can be provided. The coupling loss can be reduced.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for method for manufacturing terahertz quantum cascade laser.

DESCRIPTION OF DRAWING(S) - The drawing shows a schematic view of the terahertz quantum cascade laser.

Substrate (01)

Second grating (07)

Surface emitting section (08)

Tapered coupling region (09)

Single-mode generating section (10)

First scale grating (11)

Derwent Class Code(s): V08 (Lasers and Masers)

Derwent Manual Code(s): V08-A04A

IPC: B82Y-020/00; H01S-005/22; H01S-005/34