

Title (en)
SOLAR CONCENTRATING COLLECTOR OF THE CPC TYPE WITH AN IMPROVED ABSORBING CAVITY, WITHOUT THERMAL SHORTS AND OPTICAL LOSSES

Title (de)
SOLARKONZENTRIERENDER KOLLEKTOR DER CPC-ART MIT VERBESSERTER ABSORPTIONSKAVITÄT OHNE THERMISCHE KURZSCHLÜSSE UND OPTISCHE VERLUSTE

Title (fr)
COLLECTEUR SOLAIRE CONCENTRATEUR DU TYPE CPC AVEC CAVITÉ D'ABSORPTION AMÉLIORÉE, SANS COURTS-CIRCUITS THERMIQUES ET SANS PERTES OPTIQUES

Publication
EP 2318774 A2 20110511 (EN)

Application
EP 09788435 A 20090717

Priority
• PT 2009000042 W 20090717
• PT 10413308 A 20080717

Abstract (en)
[origin: WO2010008311A2] Low concentration CPC type concentrating collector, without optical losses and without thermal shorts which would be responsible for substantial efficiency losses, comprising at least one absorber (1) one absorber tube (10), concentrating reflectors (2) and at least one bottom set (3), said absorber (1), concentrating reflectors (2) and bottom set (3) being superimposed but without touching each other, and having a concentration value in the range of about 1 to 3. The absorber (1) has a surface selected from the group comprising an inverted V shape, any open polygonal line and/or curve and the like and combinations thereof. The invention further contemplates an absorbing grid formed by said concentrating collectors, which allows the overcoming of the thermal and optical positioning difficulties due to higher temperatures, since it comprises a system of expansion guides (13) allowing for its expansion in the longitudinal direction.

IPC 8 full level
F24J 2/10 (2006.01); **F24J 2/26** (2006.01); **F24S 10/75** (2018.01); **F24S 23/30** (2018.01); **F24S 23/70** (2018.01)

CPC (source: EP)
F24S 10/75 (2018.04); **F24S 23/80** (2018.04); **F24S 2023/838** (2018.04); **Y02E 10/44** (2013.01)

Citation (search report)
See references of WO 2010008311A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
WO 2010008311 A2 20100121; **WO 2010008311 A3 20110421**; EP 2318774 A2 20110511; PT 104133 A 20100118

DOCDB simple family (application)
PT 2009000042 W 20090717; EP 09788435 A 20090717; PT 10413308 A 20080717