

Title (en)
MODULAR SOLAR RADIATION COLLECTION-DISTRIBUTION SYSTEM

Title (de)
MODULARES SONNENSTRAHLUNGSAUFFANG-VERTEILUNGSSYSTEM

Title (fr)
SYSTEME CAPTEUR-DIFFUSEUR DE RAYONNEMENT SOLAIRE MODULAIRE

Publication
EP 1718907 A1 20061108 (EN)

Application
EP 04711258 A 20040213

Priority
US 2004004446 W 20040213

Abstract (en)
[origin: WO2005088209A1] A solar radiation collection and distribution system includes a solar collection system which includes a primary reflector (10), a secondary reflector (12) and a planar reflector (14). The focal points (1 OP, 12P) of the primary and secondary reflectors (10, 12) are offset by the same number of degrees, and the primary and secondary reflectors (10, 12) are rigidly fixed in an assembly (102) such that their focal points (1 OP, 12P) lie along a common optical axis (15). The assembly (102) is pivotable in elevation and rotatable in azimuth such that the primary reflector (10) continuously tracks the sun. A pivotable planar reflector (14), which reflects downwardly the beam from the secondary reflector (12), pivots at one-half the angular rate at which the assembly (102) pivots. This beam consists essentially of sunlight and is maintained in a substantially constant orientation independent of the elevation and azimuth of assembly (102). A distribution system (120C; 120R) for directing the beam from the planar reflector (14) includes a lateral reflector (110; 78) and a plurality of sunlight 15 distribution reflectors (72, 74; 76A, 76B) which each reflect downwardly a portion of the beam reflected by the lateral reflector (110; 78).

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Citation (search report)
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