

Title (en)  
HYBRID PHOTOVOLTAIC AND THERMAL SOLAR CONCENTRATOR

Title (de)  
HYBRIDER FOTOVOLTAISCHER UND THERMISCHER SOLARKONZENTRATOR

Title (fr)  
CONCENTRATEUR SOLAIRE THERMIQUE ET PHOTOVOLTAÏQUE HYBRIDE

Publication  
**EP 3837721 A1 20210623 (EN)**

Application  
**EP 19722217 A 20190319**

Priority  
• MK 51318 A 20180702  
• MK 2019000001 W 20190319

Abstract (en)  
[origin: WO2020009558A1] The sunlight is collected by a light concentrating tube (1) Fig.1, Fig.9 or a light concentrating funnel (2) Fig.3, after which light transporting multi wire cable (1.7) or light transporting full cable (2.4) tied in bundles of light transporting cables (3.1) bring in the Sun rays (1.1) through the tubular opening (3.2) in the electrical module of the dark chamber (3) Fig.5, Fig.9 between the photovoltaic panels (3.9) for the production of electrical energy, through which heat energy is released through the tubular openings (3.13) and built-in fans (3.14) it is transported into the heating module of the dark chamber (4) Fig.7, Fig.9 and the cooling module of the dark chamber (5) Fig.8, Fig.9. The modules (3), (4) and (5) are interconnected with tubular openings for transportation of the heated air (3.13), hot air inlet tubular opening (4.6) and hot air outlet tubular opening (4.7) coordinated through the inverter (3.16) and the voltage control units (3.15), (4.11) and (5.10) interconnected with electrical cables (3.18). Concentrators of light through the light concentrating tube (1) and the light concentrating funnel (2), through light transporting multi wire cable (1.7) and light transporting full cable (2.4), as a separate technical solution can directly transport Sun rays (1.1) into heating body-jar (7.7) placed in soil (7.3) in greenhouse (7) Fig.10.

IPC 8 full level  
**H01L 31/054** (2014.01); **H02S 10/40** (2014.01); **H02S 20/30** (2014.01); **H02S 40/42** (2014.01); **H02S 40/44** (2014.01)

CPC (source: EP)  
**H01L 31/0543** (2014.12); **H01L 31/0547** (2014.12); **H02S 10/40** (2014.12); **H02S 20/30** (2014.12); **H02S 40/425** (2014.12); **H02S 40/44** (2014.12); **Y02E 10/52** (2013.01); **Y02E 10/60** (2013.01)

Citation (search report)  
See references of WO 2020009558A1

Designated contracting state (EPC)  
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2020009558 A1 20200109**; EP 3837721 A1 20210623

DOCDB simple family (application)  
**MK 2019000001 W 20190319**; EP 19722217 A 20190319