

Title (en)
SOLAR CONCENTRATOR

Title (de)
SONNENLICHTKONZENTRATOR

Title (fr)
CONCENTRATEUR SOLAIRE

Publication
EP 3899378 A1 20211027 (EN)

Application
EP 19820661 A 20191219

Priority
• IT 201800020437 A 20181220
• IB 2019061109 W 20191219

Abstract (en)
[origin: WO2020128955A1] Described is a solar concentrator for photovoltaic systems, which is equipped with a front input surface (7), substantially flat and transparent to the solar radiation (100), a concave mirror (1), positioned behind the front input surface (7) for receiving, reflecting and concentrating the solar radiation (100), and a refractive optical element (2) having in turn a refractive surface (23) exposed to the solar radiation reflected by the concave mirror (1), a reflective surface (21) exposed to the solar radiation refracted from the refractive surface (23), and a light guide (22) for guiding the concentrated solar radiation (101), reflected by the reflective surface (21) towards at least one photovoltaic receiver (5); the refractive optical element (2) is made in a single integrated block and comprises mechanical alignment elements (8) between the refractive optical element (2) and the concave mirror (1) to ensure the superposing and the parallelism between the optical axes of the two components.

IPC 8 full level
F24S 23/79 (2018.01); **H01L 31/054** (2014.01)

CPC (source: EP)
F24S 23/12 (2018.04); **F24S 23/30** (2018.04); **F24S 23/79** (2018.04); **G02B 19/0028** (2013.01); **H01L 31/0543** (2014.12); **H01L 31/0547** (2014.12); **H01L 31/0549** (2014.12); **F24S 23/10** (2018.04); **F24S 23/71** (2018.04); **Y02E 10/40** (2013.01); **Y02E 10/52** (2013.01)

Citation (search report)
See references of WO 2020128955A1

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Designated extension state (EPC)
BA ME

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