

Title (en)
HOLLOW-CHAMBER PROFILE FOR UTILIZING SOLAR ENERGY

Title (de)
HOHLKAMMERPROFIL ZUR NUTZUNG DER SONNENENERGIE

Title (fr)
PROFILE CREUX POUR UTILISER L'ENERGIE SOLAIRE

Publication
EP 1592928 A1 20051109 (DE)

Application
EP 04700456 A 20040107

Priority
• EP 2004000034 W 20040107
• DE 10304536 A 20030204

Abstract (en)
[origin: DE10304536B3] A hollow chamber profile (10) for utilizing solar energy consists of a transparent upper section (12) and a radiation absorbing lower section (14) produced by plastic extrusion. The inside of (10) has slats (20) connected so flow channels (34) for a heat carrying medium are formed. (12) has a cover layer (50) on its outer side, consisting of plastic that absorbs ultra violet radiation. A hollow chamber profile (10) for utilizing solar energy, especially for use in roofs, consists of a transparent upper section (12) and a radiation absorbing lower section (14), produced by dual component plastic extrusion. The inside of (10) has longitudinal slats (20) connected so parallel flow channels (34) for a heat carrying medium are formed. (12) has a cover layer (50) on its outer side, produced by co-extrusion, consisting of a plastic that absorbs ultra violet radiation. (14) contains reinforcing glass fibres.

IPC 1-7
F24J 2/24; **F24J 2/04**; **F24J 2/40**

IPC 8 full level
B29C 48/12 (2019.01); **E04C 2/54** (2006.01); **E04D 3/28** (2006.01); **E04D 3/362** (2006.01); **F24J 2/04** (2006.01); **F24J 2/46** (2006.01); **F24J 2/48** (2006.01); **F24S 10/50** (2018.01); **F24S 10/70** (2018.01); **B29C 48/11** (2019.01); **B29C 48/18** (2019.01)

CPC (source: EP US)
B29C 48/12 (2019.01 - EP US); **E04C 2/543** (2013.01 - EP US); **E04D 3/28** (2013.01 - EP US); **E04D 3/362** (2013.01 - EP US); **F24S 10/501** (2018.04 - EP US); **F24S 10/504** (2018.04 - EP US); **F24S 20/67** (2018.04 - EP US); **F24S 40/52** (2018.04 - EP US); **F24S 50/80** (2018.04 - EP US); **F24S 70/14** (2018.04 - EP US); **F24S 80/30** (2018.04 - EP US); **F24S 80/525** (2018.04 - EP US); **B29C 48/11** (2019.01 - EP US); **B29C 48/18** (2019.01 - EP US); **F24S 2025/6007** (2018.04 - EP US); **Y02A 30/60** (2017.12 - EP US); **Y02B 10/20** (2013.01 - EP US); **Y02E 10/44** (2013.01 - EP US); **Y10T 428/24744** (2015.01 - EP US)

Citation (search report)
See references of WO 2004070287A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 10304536 B3 20040513; AU 2004209030 A1 20040819; AU 2004209030 B2 20110310; BR PI0407205 A 20060124; CN 100575812 C 20091230; CN 1745281 A 20060308; EP 1592928 A1 20051109; HK 1089503 A1 20061201; JP 2006515414 A 20060525; JP 4503591 B2 20100714; MX PA05008251 A 20051005; US 2006251865 A1 20061109; WO 2004070287 A1 20040819; ZA 200506116 B 20061129

DOCDB simple family (application)
DE 10304536 A 20030204; AU 2004209030 A 20040107; BR PI0407205 A 20040107; CN 200480003413 A 20040107; EP 04700456 A 20040107; EP 2004000034 W 20040107; HK 06109803 A 20060904; JP 2006501533 A 20040107; MX PA05008251 A 20040107; US 54433406 A 20060202; ZA 200506116 A 20050801