

Title (en)

PLASTICS AND GLASS RECOVERY FROM END-OF-LIFE PHOTOVOLTAIC PANELS

Title (de)

KUNSTSTOFF- UND GLASRÜCKGEWINNUNG AUS FOTOVOLTAISCHEN PANELEN AM LEBENSDAUERENDE

Title (fr)

RÉCUPÉRATION DE MATIÈRES PLASTIQUES ET DE VERRE À PARTIR DE PANNEAUX PHOTOVOLTAÏQUES EN FIN DE VIE

Publication

**EP 4259408 A1 20231018 (EN)**

Application

**EP 21835837 A 20211207**

Priority

- IT 202000030176 A 20201209
- IB 2021061419 W 20211207

Abstract (en)

[origin: WO2022123444A1] The invention relates to a process for the treatment of photovoltaic panels at the end of their life and has the aim of recovering plastics and especially high-purity glass, to put them back on the market as secondary raw materials. The process involves a mechanical treatment of grinding and physical detachment of the adhesives from the other components (glass and other plastics) and further chemical treatments of the plastics and of the fine glass fraction for the recovery of metals in order to obtain an enhanced solid residue. The process allows to reach and exceed the minimum material recovery target set by the European directive 2012/19/EU and equal to 85% by weight.

IPC 8 full level

**B29B 17/02** (2006.01); **B09B 3/00** (2022.01); **B09B 5/00** (2006.01); **B29B 17/04** (2006.01); **C22B 1/00** (2006.01); **C22B 7/00** (2006.01); **C22B 19/00** (2006.01); **C22B 21/00** (2006.01); **H01L 31/08** (2006.01)

CPC (source: EP)

**B09B 3/40** (2022.01); **B29B 17/02** (2013.01); **C22B 1/005** (2013.01); **C22B 7/007** (2013.01); **C22B 7/008** (2013.01); **C22B 19/30** (2013.01); **C22B 21/0023** (2013.01); **H01L 31/048** (2013.01); **B09B 2101/15** (2022.01); **B09B 2101/50** (2022.01); **B09B 2101/75** (2022.01); **B29B 17/04** (2013.01); **B29B 2017/0244** (2013.01); **B29B 2017/0293** (2013.01); **B29L 2009/00** (2013.01); **Y02E 10/50** (2013.01); **Y02W 30/52** (2015.05); **Y02W 30/62** (2015.05)

Citation (search report)

See references of WO 2022123444A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**WO 2022123444 A1 20220616**; EP 4259408 A1 20231018; IT 202000030176 A1 20220609

DOCDB simple family (application)

**IB 2021061419 W 20211207**; EP 21835837 A 20211207; IT 202000030176 A 20201209