

Title (en)

LASER ABLATION PLATFORM FOR SOLAR CELLS

Title (de)

LASERABLATIONSPLATTFORM FÜR SOLARZELLEN

Title (fr)

PLATE-FORME D'ABLATION PAR LASER POUR CELLULES SOLAIRES

Publication

**EP 2969373 A4 20161116 (EN)**

Application

**EP 14775131 A 20140131**

Priority

- US 201361780657 P 20130313
- US 2014014306 W 20140131

Abstract (en)

[origin: WO2014158346A1] Embodiments of the present invention relate to apparatus and methods for laser forming of holes in a substrate. In one embodiment, a laser scanning apparatus includes a movable transport assembly, and an optical device disposed adjacent the movable transport assembly, wherein the optical device comprises a polygonal mirror having a plurality of reflecting facets and an axis of rotation, an actuator configured to rotate the polygonal mirror relative to the axis of rotation, and a laser source positioned to direct electromagnetic radiation to at least one of the reflecting facets of the polygonal mirror, wherein the movable transport assembly is configured to position a substrate to receive the electromagnetic radiation reflected from the reflecting facets of the polygonal mirror.

IPC 8 full level

**B23K 26/361** (2014.01); **B23K 26/03** (2006.01); **B23K 26/064** (2014.01); **B23K 26/08** (2006.01)

CPC (source: CN EP)

**B23K 26/0821** (2015.10 - EP); **B23K 26/083** (2013.01 - CN EP); **B23K 26/1224** (2015.10 - CN); **B23K 26/382** (2015.10 - EP); **B23K 26/40** (2013.01 - CN EP); **H01L 31/022425** (2013.01 - CN EP); **H01L 31/1876** (2013.01 - CN EP); **B23K 2101/36** (2018.07 - CN); **B23K 2103/50** (2018.07 - EP); **Y02E 10/50** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Citation (search report)

- [XYI] US 2013052768 A1 20130228 - GEE JAMES M [US], et al
- [Y] US 2011126712 A1 20110602 - GEFTER PETER [US]
- [Y] DATABASE WPI Week 201215, Derwent World Patents Index; AN 2012-C18519, XP002762603
- See references of WO 2014158346A1

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

DOCDB simple family (publication)

**WO 2014158346 A1 20141002**; CN 105073333 A 20151118; CN 105073333 B 20171031; EP 2969373 A1 20160120; EP 2969373 A4 20161116; TW 201434569 A 20140916; TW I630970 B 20180801

DOCDB simple family (application)

**US 2014014306 W 20140131**; CN 201480008785 A 20140131; EP 14775131 A 20140131; TW 103104441 A 20140211