

Title (en)

Method, illumination device and system for spectral-based sorting

Title (de)

Verfahren, Beleuchtungseinheit und Vorrichtung zum spektralbasierten Sortieren

Title (fr)

Procédé, dispositif d'éclairage et système de tri à base spectrale

Publication

**EP 2085154 A3 20090909 (DE)**

Application

**EP 09450021 A 20090128**

Priority

AT 1482008 A 20080131

Abstract (en)

[origin: EP2085154A2] The method involves moving bulk goods (8, 9) in a material stream between an illumination unit (2) and a sensor (1) i.e. monochrome sensor, which is designed as a line scan camera or an area scan camera. Illumination with a predetermined wave length is implemented in a temporally or locally discrete manner using the illumination unit. Illumination is produced as a partial dark field illumination. Transmission signals are received by the sensor. The transmission signals are evaluated and bulk goods are sorted based on the evaluation. The illumination unit comprises light elements (3) i.e. high power LEDs, which are arranged outside a visible area (4) of the illumination unit. An independent claim is also included for a device for spectral based sorting of transparent and semitransparent bulk goods.

IPC 8 full level

**B07C 5/34** (2006.01); **B07C 5/342** (2006.01)

CPC (source: EP)

**B07C 5/3416** (2013.01); **B07C 5/3425** (2013.01)

Citation (search report)

- [XY] US 6137074 A 20001024 - DOAK ARTHUR G [US]
- [XY] EP 0727260 A1 19960821 - SATAKE ENG CO LTD [JP]
- [A] WO 2007110672 A1 20071004 - PILKINGTON GROUP LTD [GB], et al

Cited by

EP3263233A1; DE102017119137A1; US10987701B2

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**EP 2085154 A2 20090805; EP 2085154 A3 20090909; EP 2085154 B1 20120606**; AT 10869 U1 20091115; ES 2390845 T3 20121119; HK 1137383 A1 20100730

DOCDB simple family (application)

**EP 09450021 A 20090128**; AT 80062009 U 20090122; ES 09450021 T 20090128; HK 10101249 A 20100204