

Title (en)

Method and apparatus for identification and separation of plastic particles

Title (de)

Verfahren und Vorrichtung zur Identifikation und Separation von Kunststoffmaterialteilchen

Title (fr)

Procédé et dispositif d' identification et de séparation des particules plastiques

Publication

EP 1300200 B1 20170927 (DE)

Application

EP 02022206 A 20021001

Priority

DE 10149505 A 20011002

Abstract (en)

[origin: EP1300200A1] To identify and sort plastics materials, with identification by color and type and detection of contamination, the material passes through an acceleration stage with illumination (6,7). The illuminated material is scanned by an optical spectrometer (10), which is linked to an analysis unit (11) to measure and evaluate the spectra of the material fragments. <??>The material travels along an angled plane (5), to be separated by ultrasonic jets into at least two fractions (2,3) according to the spectrometer signals. The spectrometer can be for fluorescent, infra red and ultra violet visible spectra.

IPC 8 full level

B07C 5/342 (2006.01)

CPC (source: EP)

B07C 5/3422 (2013.01); **B07C 5/3425** (2013.01); **B07C 5/3427** (2013.01)

Citation (examination)

- US 4549659 A 19851029 - HAWKINS ALBERT P [AU], et al
- US 5917585 A 19990629 - ROE MITCHELL GREGG [US], et al
- DE 4231477 A1 19940324 - HAN KYUNG TAE [DE], et al
- GB 2264558 A 19930901 - BRITISH PETROLEUM CO PLC [GB]
- JP 2001009384 A 20010116 - ETAANARU KK
- WO 9216312 A1 19921001 - WELLMAN INC [US]
- US 5329127 A 19940712 - BECKER ARNO [DE], et al
- EP 0476416 A2 19920325 - BAYER AG [DE]

Cited by

CH702891A1; DE102016214496A1; SE1751115A1; ES2323618A1; EP1967294A3; US10088425B2; US10316173B2; US7633614B2; JP2020513547A; WO2015200111A1; WO2018095583A1; US11872596B2; WO2019054932A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

EP 1300200 A1 20030409; EP 1300200 B1 20170927; DE 10149505 A1 20030410

DOCDB simple family (application)

EP 02022206 A 20021001; DE 10149505 A 20011002