

Title (en)  
Method and device for sorting products

Title (de)  
Verfahren und Vorrichtung zum Sortieren von Produkten

Title (fr)  
Procédé et dispositif de tri de produits

Publication  
**EP 2186576 A1 20100519 (EN)**

Application  
**EP 08447046 A 20081117**

Priority  
EP 08447046 A 20081117

Abstract (en)  
The invention relates to a device and a method for sorting products (5), whereby these products move in a product flow through a detection zone (6), whereby a light beam is moved over the product flow by means of a scan such that the light beam (9) is at least partly scattered and/or directly reflected by said products (5), whereby the scattered light and/or the directly reflected light enters a detector (23) which generates a detection signal, whereby products are discerned by means of said detection signal. A stream of light is generated in the detection zone (6) between a reference element and said scan means and the intensity of this stream of light is discerned and when this intensity exceeds a preset value, a product which is hit by the light beam (9) will be qualified as a suitable product or as an inferior or strange product.

IPC 8 full level  
**B07C 5/342** (2006.01)

CPC (source: EP)  
**B07C 5/3427** (2013.01)

Citation (applicant)  
• US 4723659 A 19880209 - BILLION LEO [BE]  
• US 4634881 A 19870106 - BILLION LEO [BE]

Citation (search report)  
• [X] US 3773172 A 19731120 - MCCLURE W, et al  
• [X] WO 2008124925 A1 20081023 - UNIV MANITOBA [CA], et al  
• [X] WO 2008041124 A1 20080410 - SACMI [IT], et al  
• [DX] US 4723659 A 19880209 - BILLION LEO [BE]  
• [XA] JP 2002323450 A 20021108 - TECHNO POLYMER CO LTD  
• [A] PELLETIER M J ET AL: "FLUORESCENCE SORTING INSTRUMENT FOR THE REMOVAL OF AFLATOXIN FROM LARGE NUMBERS OF PEANUTS", REVIEW OF SCIENTIFIC INSTRUMENTS, AIP, MELVILLE, NY, US, vol. 62, no. 8, 1 August 1991 (1991-08-01), pages 1926 - 1931, XP000260772, ISSN: 0034-6748

Cited by  
CN103752528A; CN107985919A

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