

Title (en)  
Light sensor for sheet products

Title (de)  
Lichtsensor für Bogenprodukte

Title (fr)  
Détecteur de lumière pour produits en feuille

Publication  
**EP 1193204 A3 20040121 (DE)**

Application  
**EP 01120795 A 20010911**

Priority  
US 67575400 A 20000929

Abstract (en)  
[origin: EP1193204A2] The optical sensor has a fixed light source (3), a fixed light detector (4) at a defined distance from the light source and a light transfer device (6,7) attached to the movable device in which the products are to be detected for transferring light from the source to the detector when the movable device passes the fixed light source. Independent claims are also included for the following: an arrangement for transporting and moving sheet products and a method of detecting sheet products.

IPC 1-7  
**B65H 43/02**; **B65H 7/14**

IPC 8 full level  
**B41F 21/00** (2006.01); **B41F 33/06** (2006.01); **B41F 33/14** (2006.01); **B65H 7/14** (2006.01); **B65H 29/38** (2006.01); **G01V 8/16** (2006.01)

CPC (source: EP US)  
**B65H 7/14** (2013.01 - EP US); **B65H 29/38** (2013.01 - EP US); **B65H 2301/432** (2013.01 - EP US); **B65H 2405/3312** (2013.01 - EP); **B65H 2405/35** (2013.01 - EP); **B65H 2511/51** (2013.01 - EP US); **B65H 2511/515** (2013.01 - EP US); **B65H 2515/60** (2013.01 - EP US); **B65H 2553/412** (2013.01 - EP US); **B65H 2553/44** (2013.01 - EP US)

Citation (search report)

- [XY] DE 19533769 A1 19960314 - NORITSU KOKI CO LTD [JP]
- [Y] DE 19953085 A1 20000518 - HEIDELBERGER DRUCKMASCH AG [DE]
- [A] EP 0634625 A2 19950118 - OKI ELECTRIC IND CO LTD [JP]
- [X] CH 423831 A 19661115 - GRAPHICART INT [CH]
- [X] EP 0828190 A1 19980311 - NORITSU KOKI CO LTD [JP]
- [X] US 5127640 A 19920707 - ORSINGER WINSTON A [US], et al
- [A] US 3669441 A 19720613 - MINASIAN HARRY B
- [A] DE 19822438 A1 19990204 - HEIDELBERGER DRUCKMASCH AG [DE]
- [A] US 4046367 A 19770906 - MERKER GEORGE, et al

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1193204 A2 20020403**; **EP 1193204 A3 20040121**; **EP 1193204 B1 20051123**; AT E310702 T1 20051215; CN 1172176 C 20041020; CN 1346051 A 20020424; DE 10145100 A1 20020502; DE 50108146 D1 20051229; HK 1046034 A1 20021220; JP 2002207085 A 20020726; US 6566672 B1 20030520

DOCDB simple family (application)  
**EP 01120795 A 20010911**; AT 01120795 T 20010911; CN 01120331 A 20010724; DE 10145100 A 20010911; DE 50108146 T 20010911; HK 02107554 A 20021017; JP 2001301479 A 20010928; US 67575400 A 20000929