

Title (en)  
Method of and apparatus for identifying a coin

Title (de)  
Verfahren und Vorrichtung zur Münzidentifizierung

Title (fr)  
Méthode et dispositif pour identifier une pièce de monnaie

Publication  
**EP 1104920 A1 20010606 (EN)**

Application  
**EP 99204084 A 19991202**

Priority  
EP 99204084 A 19991202

Abstract (en)  
To provide an extremely highly reliable coin identifying method and an apparatus, capable of exactly identifying a clad coin without having to pay attention to what kind it belongs to. It employs an eddy current loss detecting type magnetic sensor comprising coils, which said magnetic sensor being formed by arranging an exciting coil and a reflection detecting coil on the same side with respect to a coin to be identified. The method includes exciting the exciting coil by synthesizing together at least three kinds of frequencies, calculating an attenuation rate by dividing, with an output of the reflection detecting coil when not having a coin, an output difference of the reflection detecting coil between a time having a coin and a time not having a coin in relation to various frequencies, thereby performing the coin identification. <IMAGE>

IPC 1-7  
**G07D 5/08**

IPC 8 full level  
**G07D 3/02** (2006.01); **G07D 5/08** (2006.01)

CPC (source: EP)  
**G07D 3/02** (2013.01); **G07D 5/08** (2013.01)

Citation (applicant)  
• JP 2567654 B2 19961225  
• JP H0973568 A 19970318 - GLORY KOGYO KK

Citation (search report)  
• [XDA] EP 0336018 A2 19891011 - NIPPON CONLUX CO LTD [JP]  
• [A] EP 0724237 A2 19960731 - ASAHI SEIKO CO LTD [JP]  
• [A] US 5213190 A 19930525 - FURNEAUX DAVID M [GB], et al  
• [A] US 5040657 A 19910820 - GUNN WILLIAM L [US], et al  
• [A] EP 0304535 A2 19890301 - MARS INC [US]  
• [A] EP 0886247 A2 19981223 - NAT REJECTORS GMBH [DE]  
• [A] EP 0566154 A1 19931020 - NIPPON CONLUX CO LTD [JP]

Cited by  
CN105264575A; CN102737432A; GB2393840A; EP1241636A3; CN104813370A; EP2626839A1; CN103258365A; EP1577844A3; US9830762B1; US7490709B2; US6755730B2; US7537099B2; WO03041021A1; US9633500B1; US10049521B1; US9916713B1; US10685523B1; US10181234B2; US10964148B2; US9870668B1; US10068406B1; US11625968B1; US11443581B2; JP2013164708A; US7584833B2; US9875593B1; US10043333B1; US10629020B1; US6988606B2; US6892871B2; US9818249B1; US9934640B2; US10089812B1; US10679449B2; US7552810B2

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

DOCDB simple family (publication)  
**EP 1104920 A1 20010606; EP 1104920 B1 20060510**; AT E326044 T1 20060615; DE 69931267 D1 20060614; DE 69931267 T2 20070308; ES 2259225 T3 20060916

DOCDB simple family (application)  
**EP 99204084 A 19991202**; AT 99204084 T 19991202; DE 69931267 T 19991202; ES 99204084 T 19991202