Title (en)
Device for sorting solid objects

Title (de)
Vorrichtung zur Sortierung von festen Gegenständen

Title (fr)
Machine de triage d'objets solides

Publication
EP 0744223 B1 20000119 (FR)

Application
EP 95106834 A 19950505

Priority
EP 95106834 A 19950505

Abstract (en)
[origin: WO9634702A1] The machine is comprised of a modular rotary drum (10) comprised of different individual sections (10a, 10b, 10c, 10d, 10e) having each a truncated shape converging in the forward moving direction of the objects to be sorted. The walls of the different sections are perforated with calibrated sorting holes (26) whose gauge increases from the inlet towards the outlet. The internal walls of the different sections are provided with metal sheets describing a spiral which provides for the guiding of the charge to be sorted, during its forward moving. Each sorting hole (26) has the shape of an elongate slot which widens in the forward moving direction. Application to the sorting of the charge of horizontal crushers.

IPC 1-7 (main, further and additional classification)
B07B 1/18; B07B 1/22

IPC 8 full level (invention and additional information)
B07B 1/22 (2006.01); **B07B 1/18** (2006.01); **B07B 1/24** (2006.01); **B07B 1/46** (2006.01)

CPC (invention and additional information)
B07B 1/18 (2013.01); **B07B 1/24** (2013.01)

Cited by
DE102008014301B4; DE102008014301A1

Designated contracting state (EPC)
AT BE DE ES FR GB IT PT

EPO simple patent family
WO 9634702 A1 19961107; AT 188893 T 20000215; AU 5500096 A 19961121; BR 9608165 A 19990209; DE 69514646 D1 20000224; DE 69514646 T2 20000608; EP 0744223 A1 19961127; EP 0744223 B1 20000119; ES 2141277 T3 20000316; HU 219665 B 20010628; HU 9801650 A2 19990528; HU 9801650 A3 20000328; JP H11506386 A 19990608; MX 9707185 A 19971129; PL 182215 B1 20011130; PL 322492 A1 19980202; PT 744223 E 20000531; SK 148097 A3 19980304; SK 281973 B6 20010911; TR 199701370 T1 19980221; US 5984106 A 19991116

INPADOC legal status

2007-12-31 [BERE] BE: LAPSED
- Owner name : S.A. *MAGOTTEAUX INTERNATIONAL
- Effective date : 20050531

2006-08-16 [REG ES FD2A] ANNOUNCEMENT OF LAPSE IN SPAIN
- Effective date : 20050506

2006-03-10 [REG FR ST] NOTIFICATION OF LAPSE
- Effective date : 20060131

2006-01-31 [PG25 FR] LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO
- Ref Country Code : FR
- Free text : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES
- Effective date : 20060131

2006-01-25 [GBPC] GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE
- Effective date : 20050505

2005-12-01 [PG25 DE] LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO
- Ref Country Code : DE
- Free text : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES
- Effective date : 20051201

2005-11-30 [BERE] BE: LAPSED
- Owner name : S.A. *MAGOTTEAUX INTERNATIONAL
- Effective date : 20050531

2005-11-07 [PG25 PT] LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO
- Ref Country Code : PT
- Free text : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES
- Effective date : 20051107

2005-05-31 [PG25 BE] LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO
- Ref Country Code : BE
- Free text : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES
- Effective date : 20050531

2005-05-06 [PG25 ES] LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO
- Ref Country Code : ES
- Free text : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES
- Effective date : 20050506

2005-05-05 [PG25 AT] LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO
- Ref Country Code : AT
- Free text : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES
- Effective date : 20050505

2005-05-05 [PG25 GB] LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO
- Ref Country Code : GB
- Free text : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES
- Effective date : 20050505

2005-05-05 [PG25 IT] LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO
- Ref Country Code : IT
- Free text : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES
- Effective date : 20050505

2004-05-27 [PGFP AT] POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE
- Ref Country Code : AT
- Payment date : 20040527
- Year of fee payment : 10

2004-05-07 [PGFP BE] POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE
- Ref Country Code : BE
- Payment date : 20040507
- Year of fee payment : 10

2004-05-06 [PGFP PT] POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE
- Ref Country Code : PT
- Payment date : 20040506
- Year of fee payment : 10

2004-05-04 [PGFP FR] POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE
- Ref Country Code : FR
- Payment date : 20040504
- Year of fee payment : 10

2004-04-30 [PGFP ES] POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE
- Ref Country Code : ES
- Payment date : 20040430
- Year of fee payment : 10

2004-04-30 [PGFP GB] POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE
- Ref Country Code : GB
- Payment date : 20040430
- Year of fee payment : 10

2004-04-23 [PGFP DE] POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE
- Ref Country Code : DE
- Payment date : 20040423
- Year of fee payment : 10

2002-01-01 [REG GB IF02] EUROPEAN PATENT IN FORCE AS OF 2002-01-01

2001-01-03 [26N] NO OPPOSITION FILED

2000-05-31 [REG PT SC4A] TRANSLATION IS AVAILABLE
- Free text : AVAILABILITY OF NATIONAL TRANSLATION
- Effective date : 20000218

2000-04-14 [ITF] IT: TRANSLATION FOR A EP PATENT FILED
- Owner name : STUDIO TORTA S.R.L.

2000-03-16 [REG ES FG2A] DEFINITIVE PROTECTION
- Document : ES 2141277 T3

2000-02-24 [REF] CORRESPONDS TO:
- Document : DE 69514646 20000224

2000-02-09 [GBT] GB: TRANSLATION OF EP PATENT FILED (GB SECTION 77(6)(A)/1977)
- Effective date : 20000119

2000-01-19 [AK] DESIGNATED CONTRACTING STATES:
- Kind Code of Ref Document : B1
- Designated State(s) : AT BE DE ES FR GB IT PT

2000-01-19 [REF] CORRESPONDS TO:
- Document : AT 188893 T 20000215

1999-06-23 [17Q] FIRST EXAMINATION REPORT
- Effective date : 19990505

1997-05-21 [17P] REQUEST FOR EXAMINATION FILED
- Effective date : 19970305

1997-02-26 [RBV] DESIGNATED CONTRACTING STATES (CORRECTION)
- Designated State(s) : AT BE DE ES FR GB IT PT

1996-11-27 [AK] DESIGNATED CONTRACTING STATES:
- Kind Code of Ref Document : A1
- Designated State(s) : AT BE DE ES FR GB IT PT

1996-11-27 [AX] REQUEST FOR EXTENSION OF THE EUROPEAN PATENT TO:
- Free text : LT;SI