

Title (en)

STATIC CHARGE AND DUST REMOVING DEVICE

Title (de)

VORRICHTUNG ZUR BESEITIGUNG VON STATISCHER LADUNG UND STAUB

Title (fr)

DISPOSITIF D'ELIMINATION DES CHARGES STATIQUES ET DES POUSSIERES

Publication

**EP 1759776 A4 20080521 (EN)**

Application

**EP 05751544 A 20050615**

Priority

- JP 2005010924 W 20050615
- JP 2004184158 A 20040622

Abstract (en)

[origin: EP1759776A1] This static electricity and dust removing apparatus has a base box (11) provided with an airflow inlet port (16), and a processing head (23) attached to the base box (11) through a support column (21), wherein a processing space (24) is formed between the airflow inlet port (16) and the processing head (23). Air curtains for isolating the processing space (24) from the outside due to air from a spout of an air spout pipe (33) are formed at a front opening portion (29) and right and left side opening portions (28) of the apparatus. Ionized air generated by an ion generator (42) is spouted into the processing space (24), so that the ionized air is sprayed on matters to be processed which are disposed in the processing space (24) and dust is removed from the matters to be processed. Thereby, a static electricity and dust removing operation to the dust adhering to the matters to be processed can be efficiently performed within a short time, and work environment can be prevented from being contaminated due to a leakage of the removed dust.

IPC 8 full level

**B08B 5/02** (2006.01); **B08B 6/00** (2006.01); **B08B 15/02** (2006.01); **H05F 3/04** (2006.01)

CPC (source: EP US)

**B08B 5/02** (2013.01 - EP US); **B08B 6/00** (2013.01 - EP US); **B08B 9/00** (2013.01 - EP US); **B08B 15/023** (2013.01 - EP US);  
**H05F 3/04** (2013.01 - EP US); **B08B 2215/003** (2013.01 - EP US)

Citation (search report)

- [X] US 2002152636 A1 20021024 - ERNST GERARD W [US], et al
- [X] US 6490746 B1 20021210 - ERNST GERARD W [US], et al
- [X] US 6565669 B1 20030520 - BOHON III ELLIS GRAY [US]
- [X] GB 2253271 A 19920902 - SEIKO INSTR INC [JP]
- [A] US 5008594 A 19910416 - SWANSON RALPH W [US], et al
- [A] US 5506744 A 19960409 - RUSH JOHN M [US], et al
- [A] US 4987630 A 19910129 - ALLEN PHILLIP G [GB], et al
- [A] JP H02154423 A 19900613 - NEC CORP
- See references of WO 2005123284A1

Cited by

AU2011328454B2; CN102814301A; CN103861842A; EP2269943A3; CN109877116A; US9283146B2; WO2014053079A1; WO2012172418A3;  
WO2012062478A1; US8820365B2; US9272092B2

Designated contracting state (EPC)

DE IT

DOCDB simple family (publication)

**EP 1759776 A1 20070307; EP 1759776 A4 20080521; CN 1972763 A 20070530; JP 2006007012 A 20060112; TW 200600200 A 20060101;**  
US 2009158537 A1 20090625; WO 2005123284 A1 20051229

DOCDB simple family (application)

**EP 05751544 A 20050615; CN 200580020896 A 20050615; JP 2004184158 A 20040622; JP 2005010924 W 20050615;**  
TW 94118531 A 20050606; US 63056105 A 20050615