

Title (en)

Milling and classifying apparatus, pneumatic impact pulverizer, air classifier and method for producing toner

Title (de)

Vorrichtung zur Zerkleinerung und Klassifikation, Pneumatische Prallmühle, Siehter und Verfahren zur Herstellung von Tonern

Title (fr)

Dispositif de classification et broyage, broyeur à impact pneumatique, séparateur pneumatique et procédé pour la fabrication de toner

Publication

EP 1616624 A2 20060118 (EN)

Application

EP 05015126 A 20050712

Priority

- JP 2004211214 A 20040720
- JP 2004205500 A 20040713

Abstract (en)

Disclosed is a milling and classifying apparatus, adapted to produce toner fine particles, comprising a collision mill, and an air classifier, wherein the collision mill comprises a jet nozzle room, a path, a collision plate, and a collision member mounted to a support of the collision plate at downstream of the collision plate, the air classifier comprises a dispersion room and a classification room, the classification room is disposed below the dispersion room, and a flow stabilizer is arranged at a central suction of the separator core to control swirl stream generated within the classification room so as to centrifuge the powder into coarse particles and fine particles by action of the swirl stream.

IPC 8 full level

B02C 19/06 (2006.01); **B02C 23/12** (2006.01); **B07B 7/086** (2006.01); **G03G 9/08** (2006.01)

CPC (source: EP)

B02C 19/066 (2013.01); **B02C 23/12** (2013.01); **B07B 7/086** (2013.01); **G03G 9/0808** (2013.01); **G03G 9/0817** (2013.01)

Cited by

CN114939531A; CN115999728A; CN102397841A; CN113019641A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1616624 A2 20060118; **EP 1616624 A3 20060315**; **EP 1616624 B1 20091216**; DE 602005018292 D1 20100128

DOCDB simple family (application)

EP 05015126 A 20050712; DE 602005018292 T 20050712