

Title (en)

Apparatus for separating and recovering solid toner particles transported by a gas flow.

Title (de)

Vorrichtung zum Trennen und Zurückgewinnen von durch eine Gasströmung transportierten festen Entwicklerteilchen.

Title (fr)

Appareil pour séparer et récupérer des particules solides de révélateur transportées par un flux gazeux.

Publication

EP 0371828 B1 19950830 (FR)

Application

EP 89402619 A 19890925

Priority

FR 8815595 A 19881129

Abstract (en)

[origin: JPH02188781A] PURPOSE: To make it possible to nearly completely recover the particles in gaseous flow by arranging a spiral member near the outlet in a discharge pipe and forming the spiral member in such a manner that its surface has spiral edges in contact with the inside surface of the discharge pipe and that the member inclines in the same direction as the spiral orbit of solid particles. CONSTITUTION: A suction pipe 43 and the discharge pipe 44 are provided on the upper part of a separating chamber composed of a cylindrical upper part 41 and a circular truncated cone-shaped lower part 42. The section pipe is connected to a passage 25 for introducing the air contg. the developer particles and is arranged in a tangent direction with the cylindrical wall of the part 41 in such a manner that the air arriving at the chamber via the pipe generates vortices in the chamber. The spiral member 52 arranged in the discharge pipe 47 is disposed near the outlet 46. The member 52 is formed of an extremely thin plate and has the surface regulated by the spiral edges 53. As a result, the sepn. and recovery of the developer solid particles carried by the gaseous flow are made possible.

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B04C 5/181; G03G 21/00

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CPC (source: EP US)

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Cited by

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