

Title (en)

Classifying rotor for a centrifugal pneumatic separator.

Title (de)

Sichtrad für Schleuderrad-Windsichter.

Title (fr)

Roue de triage pour un séparateur pneumatique à roue centrifuge.

Publication

**EP 0546458 A1 19930616 (DE)**

Application

**EP 92120687 A 19921204**

Priority

DE 4140656 A 19911210

Abstract (en)

[origin: JPH0655140A] PURPOSE: To make it possible to reduce the labor for dynamic balancing and to carry out the operation at a high circumferential speed. CONSTITUTION: The classifying wheel 1 consisting of a circular disk 2 which has a hub 3, a cover disk 4 and blades 5 which are arranged between both disks and extend in parallel with the axis 8 of rotation, is integrally produced completely by one part from a sintered material. A hole formed at the hub 3 is worked in compliance with the finish size for directly fitting the classifying wheel 1 to a drive shaft. A groove 7 molded at the hub 3 for housing the correspondingly molded fitting key is composed to a semi-circular shape in cross-section and flow passages 6 are formed by the surfaces of classifying wheel blades 5 extending parallel to each other in direction of the axis 8 of rotation of the wheel. The faces are coupled to each other by arcuate faces in a transition range with respect to the circular disk 2 or the cover disk 3. The edges of the blades 5 existing on the outer periphery of the classifying wheel 1 are slightly inclined.

Abstract (de)

Beschrieben wird die Gestaltung eines Sichtrades (1) für einen Schaufelrad-Windsichter, d.h. einen Windsichter mit von der Sichtluft entgegen seiner Schleuderrichtung von außen nach innen durchströmten, rotierenden Sichtrad (1) mit kranzförmig angeordneten, parallel zur Drehachse verlaufenden Schaufeln (5), die zwischen einer die Sichtradrnabe (3) tragenden Kreisscheibe (2) und einer ringförmigen Deckscheibe (4) angeordnet sind. Das Sichtrad (1) ist vollständig und in einem Stück aus einem verschleißfesten Sinterwerkstoff hergestellt. Die Strömungskanäle (6) des Sichtrades (1) werden durch parallel zueinander und in Richtung der Drehachse verlaufende Flächen der Sichtrad-Schaukeln (5) gebildet. <IMAGE>

IPC 1-7

**B07B 7/083**

IPC 8 full level

**B07B 7/083** (2006.01); **B22F 5/00** (2006.01); **F04D 29/28** (2006.01)

CPC (source: EP US)

**B07B 7/083** (2013.01 - EP US); **B22F 5/00** (2013.01 - EP US); **F04D 29/283** (2013.01 - EP US); **F04D 29/289** (2013.01 - EP US); **F05B 2230/22** (2013.01 - EP US)

Citation (search report)

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- [A] DE 3131442 A1 19830224 - MITSUBISHI ELECTRIC CORP [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 14, no. 80 (C-689)(4023) 15. Februar 1990 & JP-A-01 297 182 ( KURIMOTO LTD. ) 30. November 1989

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