

Title (en)
SORTING PNEUMATICALLY CONVEYED MATERIAL.

Title (de)
SORTIERUNG VON PNEUMATISCH GEFÖRDERTEM MATERIAL.

Title (fr)
TRIAGE D'UN MATERIAU TRANSPORTE PNEUMATIQUEMENT.

Publication
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Application
EP 88907557 A 19880829

Priority
• AU 8800333 W 19880829
• AU PI404987 A 19870828

Abstract (en)
[origin: WO8901832A1] Apparatus for sorting material, for example, fibrous material, as it is pneumatically conveyed in a gas stream includes a duct (12) for the gas stream, and a monitoring station (18, 19) for illuminating the material as it passes in the duct, and for monitoring the intensity of light reflected by the material. There is a lateral opening (22) in the duct, and means (20) responsive to a predetermined change in the intensity caused by a portion of material of darker or lighter shade to deflect such portion through the lateral opening (22). The monitoring station (18, 19) comprises an array (25a, 25b) of substantially monochromatic light sources (26) arranged to illuminate the interior of the duct through a transparent window (27) in the duct, whereby to achieve a substantially uniform diffuse illumination of the passing material in the duct, and a detector (28) responsive to a change in the intensity of reflected light arising from the passage of a portion of the material of darker or lighter shade to generate an output signal which reflects this change. In an alternative construction, any parameter of the material may be monitored and there is means (26) responsive to a predetermined change in the monitored parameter, caused by any specific portions of the material, to discharge a gas pulse transversely of the duct. The pulse is timed and positioned so as to deflect the portion of material through the lateral opening (22). The opening (22) extends across substantially the full width of the duct (12) and is dimensioned to be large enough to accept portions of the material deflected by the gas pulse but not large enough to capture other material in the absence of the pulse.

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CPC (source: EP)
B07C 5/342 (2013.01); **B07C 5/365** (2013.01)

Citation (examination)
EP 0146299 A1 19850626 - GUNSONS SORTEX LTD [GB], et al

Cited by
CN111687077A; US5761771A; US5819373A; US6421883B1

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