

Title (en)
Selective cleaning line

Title (de)
Selektive Reinigungslinie

Title (fr)
Ligne de nettoyage sélective

Publication
EP 1103640 B1 20040303 (DE)

Application
EP 00811064 A 20001110

Priority
• CH 215299 A 19991124
• DE 10006853 A 20000216

Abstract (en)
[origin: EP1103640A1] The transport system to carry fiber flocking materials, from a bale breaker to fiber processing stations, has a mechanism to divert the flocking flow stream. One or more test units (PF) monitor the soiling of the fiber flocking to give the level of impurities present. The measurements are evaluated, to determine the path to be taken by the flocking material according to the intensity of cleaning required. The flock transport system has one or more bypass channels in the material movement path, to divide the flow into two or more separate flows. The first flow path has no processing stages, and the other paths have stages to act on the flocking. At the end of the bypass stretch, all the material flows are combined into a single path. A monitor is at each material feed, with a following direction change unit (UM,U1-U3). The monitor registers the condition of the material, with evaluation, and controls the direction change unit accordingly to divert it into the appropriate path for the cleaning required, or into the path where no cleaning actions are executed. The different paths are structured to apply various cleaning actions and processing characteristics, from a common material feed inflow, where the quality of the flocking material is monitored. The measurements by the monitor are evaluated to determine which transport path is to be selected according to the nature and extent of impurities registered. The separate paths come together at their end, into a common transport path. An Independent claim is included for a fiber flocking processing assembly, where the flocking material from the bales is monitored, and directed into appropriate paths through various cleaning stages as required. Preferred Features: The monitors register the level of nepping and/or impurities in the flocking and/or the looseness, to trigger the action of at least one path direction change unit. A monitor can be coupled and integrated into other measurement units such as a separator (VS) for foreign fibers. The direction change units are linked to a control to set the movement paths of the fiber material according to its type and/or delivered vols. and/or the final composition required. The fiber processing stages, in the transport paths, give a coarse cleaning, fine cleaning, intensive cleaning, intensive flocking loosening or a combination of actions.

IPC 1-7
D01G 31/00; **D01G 13/00**

IPC 8 full level
D01G 13/00 (2006.01); **D01G 31/00** (2006.01)

CPC (source: EP US)
D01G 13/00 (2013.01 - EP US); **D01G 31/003** (2013.01 - EP US)

Cited by
CN111519293A; WO2017117688A1

Designated contracting state (EPC)
CH DE GR IT LI TR

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EP 1103640 A1 20010530; **EP 1103640 B1 20040303**; DE 50005500 D1 20040408; US 6421883 B1 20020723

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EP 00811064 A 20001110; DE 50005500 T 20001110; US 72142300 A 20001122