Title (en)

Furnish handling method and a furnish forming line for use in the manufacture of composition board.

Title (de

Verfahren zur Behandlung von Schüttgut und Vorrichtung zu deren Bildung zur Verwendung bei der Herstellung zusammengesetzter Platten.

Title (fr)

Procédé de traitement de matière en vrac et installation de conformation de ces matières pour la fabrication de panneaux composés.

Publication

EP 0055308 A1 19820707 (EN)

Application

EP 80304612 A 19801219

Priority

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Abstract (en)

In the continuous-line manufacture of composition board from furnish, the latter is moved in a continuous-flow manner through a processing line and distributed for deposition at a uniform rate over a preselected area to continuously form a mat for compaction. Commercially economical production flow rates are achieved with a lightweight refined wood furnish to form fiber-board having directional properties without relying on pneumatic impulsion while uniformly distributed furnish is delivered substantially free of air turbulence effects enabling fiber orientation by means of an electrical field. Control of movement and accurate metering of furnish are facilitated by continuously over-feeding furnish into the processing line by means of a cyclone (10) and a double-screw and returning excess furnish from the ends of the screw via a line (22) as part of an initial distribution of furnish over one dimension of the mat to be formed. The initially distributed furnish is confined in the remaining dimension by baffle structures (28, 30) while being continuously moved in the direction of the mat; the confined profile feed is metered in a chamber (48) by means of slow-rotating bristled feed rolls, accelerated by mechanical contact by means of a fast-rotating scalping roll, and then distributed over the full area of deposition by means of brushed distribution rolls (82). Lightweight fibrous furnish is delivered for screening to separate fiber clusters followed by electrical field orientation of individualized fibers and deposition on a moving web (142). The furnish distributed over the forming area is moved along a flow path which is substantially normal to the surface of deposition.

IPC 1-7

D21H 5/26; B29J 5/04

IPC 8 full level

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CPC (source: EP)

B27N 3/14 (2013.01)

Citation (search report)

US 2825388 A 19580304 - HALE EDWARD C, et al

Cited by

CN103619551A; CN110171051A; WO2012171991A1; WO0029668A1

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