

Title (en)
Roller screen or spreading machine

Title (de)
Walzensieb- und -streumaschine

Title (fr)
Tamis à rouleaux ou machine d'épandage

Publication
EP 1010508 B1 20031015 (DE)

Application
EP 99122802 A 19991117

Priority
DE 19857498 A 19981214

Abstract (en)
[origin: CA2292173A1] The invention concerns a roller sifting or dispersing machine for the classification or dispersing of wood chips, fibers, or similar materials, having at least one roller set composed of several rollers axially aligned in parallel and having the same rotation direction; together, these rollers form a roller bed that extends longitudinally at right angles to the rollers and is equipped with an input end for the material to be sieved and an output end for the course material, whereby each roller's upper side turns toward the output end; the rollers are equipped with numerous annular grooves axially equi-spaced and separated by annular crosspieces that form the outer sheathing surface of the roller. Adjacent rollers are arranged so that the annular cross members of one roller are opposite the annular grooves of the other roller, thus being largely closed along their circumference when viewed along the roller bed surface, but having openings for the passage of chips in the direction perpendicular to the roller bed surface. For improved sifting or classification the invention proposes that the annular grooves as well as the annular crosspieces be located perpendicular to the roller surface and that the outer sheathing surface of each annular crosspiece be equipped with circumferentially aligned teeth whose leading sides are shaped more steeply than their back edges leading to the base of the following tooth side, whereby an axial view of the annular crosspiece teeth is seen as a gradient that is in the opposite direction to that of the adjacent roller but is of the same height.

IPC 1-7
B27N 3/14; **B07B 1/15**

IPC 8 full level
B07B 13/04 (2006.01); **B07B 1/15** (2006.01); **B27N 3/14** (2006.01)

CPC (source: EP KR US)
B07B 1/15 (2013.01 - EP US); **B07B 13/04** (2013.01 - KR); **B27N 3/143** (2013.01 - EP US)

Cited by
DE10206594A1; WO03043749A1; US11911935B2; WO2020244876A1

Designated contracting state (EPC)
DE FI IT SE

DOCDB simple family (publication)
DE 19857498 C1 20000615; BR 9907482 A 20000815; CA 2292173 A1 20000614; CA 2292173 C 20030318; CN 1191133 C 20050302; CN 1256975 A 20000621; DE 59907366 D1 20031120; EP 1010508 A1 20000621; EP 1010508 B1 20031015; KR 100331246 B1 20020406; KR 20000052454 A 20000825; US 6257414 B1 20010710

DOCDB simple family (application)
DE 19857498 A 19981214; BR 9907482 A 19991213; CA 2292173 A 19991214; CN 99126208 A 19991214; DE 59907366 T 19991117; EP 99122802 A 19991117; KR 19990056686 A 19991210; US 45639099 A 19991208