

Title (en)

Interfolding machine of a web or sheet of paper with a vacuum conveying roller

Title (de)

Maschine zum Ineinanderfalten einer Bahn oder von Blättern mit einer Vakuumtransportwalze

Title (fr)

Machine de pliage enchevêtre d'une bande ou de feuilles de papier avec un rouleau transporteur à vide

Publication

EP 1457444 A2 20040915 (EN)

Application

EP 04003595 A 20040218

Priority

- EP 04003595 A 20040218
- EP 03425091 A 20030218

Abstract (en)

The roller (1) is used for conveying a web or sheet of paper (20) in paper converting machines, for example, a rewinding, a winding, an interfolding machine. It comprises a first outer cylindrical tubular body (2) equipped with a plurality of radial holes (3), arranged according to substantially longitudinal rows, capable of rotating with respect to a second inner fixed body (4) coaxial to it and connected to a suction system. The second body (4) has tubular cylindrical geometry like the first body (2) and has a plurality of apertures (5) and two radial boards (7) arranged at opposite sides with respect to the apertures (5). The inner surface of the first cylindrical tubular body (2), together with the radial boards (7) and to the external surface of the second tubular body (4), define a suction chamber (6) that brings selectively in communication selected rows of holes (3) of the first cylindrical tubular body (2) with the apertures (5) of the second tubular body (4) and then with the suction system of the machine during the relative rotation of the two bodies. Therefore, a web or sheet of paper (20) adheres to the external surface of the first body (2) only in the portion P1P2 of surface set between the rows of holes (3') that communicates with the suction chamber (figure 4). <IMAGE>

IPC 1-7

B65H 27/00

IPC 8 full level

B65H 45/24 (2006.01); **B65H 27/00** (2006.01)

CPC (source: EP)

B65H 27/00 (2013.01); **B65H 45/24** (2013.01); **B65H 2406/33** (2013.01); **B65H 2406/3614** (2013.01)

Cited by

WO2018019679A1; CN113277365A; IT201600077916A1; CN109496196A; ITUB20159653A1; CN108473266A; CN113490633A; CN108698780A; ITUA20162080A1; WO2017168232A1; WO2017109670A1; US11034541B2; TWI455863B; IT201900001579A1; US11629029B2; IT202100012539A1; US11027933B2; IT202100011531A1; US10793390B2; IT202100010283A1; WO2020021490A1; WO2022107057A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1457444 A2 20040915; **EP 1457444 A3 20051026**; **EP 1457444 B1 20111109**; **EP 1457444 B2 20181024**

DOCDB simple family (application)

EP 04003595 A 20040218