

Title (en)

Method in contact-free air-drying of a material web as well as a nozzle-blow-box and a pulp dryer that make use of the method.

Title (de)

Verfahren zum Lufttrocknen von freigeführten Materialbahnen sowie Blasluftdüse und Papiertrockner zur Durchführung des Verfahrens.

Title (fr)

Procédé pour le séchage sans contact par l'air chaud d'une bande ainsi qu'un ciasson d'insufflation et un séchoir pour papier utilisant le procédé.

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Application

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Abstract (en)

The invention concerns a method in air-drying of material webs, in particular of material webs of relatively high grammage, such as pulp webs. Also, the invention concerns a nozzle-blow-box and a pulp dryer that make use of the method. To the web (W) to be dried, from underneath the web, air blowings (B2) substantially perpendicular to the web and air blowings (B3) substantially parallel to the plane of the web (W) are applied. By means of these blowings (B2,B3), both heat is transferred to the web (W) and the web is supported by air free of contact, and the run of the web through the dryer is stabilized. In order to improve the transfer of heat in comparison with a plane carrier face (FIG. 7C; 31c), the air flow velocity parallel to the plane of the web (W) to be dried and air-supported in connection with the nozzle-carrier face (31) is initially (34) kept substantially invariable, whereupon the air flow velocity is lowered in the lateral areas (35;35b;35d;35e) of said carrier face (31) by employing lateral areas (35, 35b,35e) of the nozzle-carrier face (31) that become rampwise and/or stepwise lower in the air-flow direction. <IMAGE>

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Citation (search report)

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