

Title (en)

WATER SPRAY WEB COOLING APPARATUS FOR WEB DRYER

Title (de)

VORRICHTUNG ZUR KÜHLUNG VON BAHNEN MITTELS WASSERSPÜLUNG FÜR EINEN WASSERTROCKNER

Title (fr)

APPAREIL DE REFROIDISSEMENT DE FEUILLES PAR PULVERISATION D'EAU DESTINE A UN SECHOIR DE FEUILLES

Publication

EP 1282804 B1 20050713 (EN)

Application

EP 01931169 A 20010501

Priority

- US 0140649 W 20010501
- US 20485600 P 20000517

Abstract (en)

[origin: WO0188448A2] Apparatus and a method for the evaporative cooling of a web within a dryer in a compact manner. Excess fluid overspray is controlled, thereby avoiding problems with fluid depositing on internal surfaces of the dryer, which can cause mineral build-up and can result in web breaks or quality defects if fluid drips onto the web. More specifically, a water delivery system is used which directs a water mist to the web by appropriate design and placement of the spray nozzles. The quantity of water delivered to the web is regulated, and is preferably based upon web temperature. Excess mist is controlled by directing hot air to effectively vaporize the excess mist before it is able to contact the internal surfaces of the dryer enclosure and its internal components.

[origin: WO0188448A2] Apparatus and a method for the evaporative cooling of a web (5) within a dryer in a compact manner. Excess fluid overspray is controlled, thereby avoiding problems with fluid depositing on internal surfaces of the dryer, which can cause mineral build-up and can result in web breaks or quality defects if fluid drips onto the web. More specifically, a water delivery system (15) is used which directs a water mist to the web by appropriate design and placement of the spray nozzles (18). The quantity of water delivered to the web is regulated, and is preferably based upon web temperature. Excess mist is controlled by directing hot air to effectively vaporize the excess mist before it is able to contact the internal surfaces of the dryer enclosure (10) and its internal components.

IPC 1-7

F26B 1/00

IPC 8 full level

F26B 13/10 (2006.01); **F26B 13/20** (2006.01)

CPC (source: EP)

F26B 13/10 (2013.01); **F26B 13/104** (2013.01)

Designated contracting state (EPC)

AT CH DE FR GB LI NL

DOCDB simple family (publication)

WO 0188448 A2 20011122; **WO 0188448 A3 20020314**; AT E299577 T1 20050715; AU 5762901 A 20011126; CA 2406110 A1 20011122; CA 2406110 C 20081202; DE 60111936 D1 20050818; DE 60111936 T2 20060420; EP 1282804 A2 20030212; EP 1282804 B1 20050713

DOCDB simple family (application)

US 0140649 W 20010501; AT 01931169 T 20010501; AU 5762901 A 20010501; CA 2406110 A 20010501; DE 60111936 T 20010501; EP 01931169 A 20010501