

Title (en)

An arrangement for drying a tissue paper web and a method for recapturing steam during drying of a tissue paper web

Title (de)

Anordnung zum Trocknen einer Tissuepapierbahn und Verfahren zum Zurückgewinnen von Dampf beim Trocknen einer Tissuepapierbahn

Title (fr)

Dispositif de séchage d'une bande de papier mousseline et procédé de récupération de vapeur pendant le séchage d'une bande de papier tissu

Publication

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Application

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Priority

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Abstract (en)

The invention relates to an arrangement (1) for drying a tissue paper web. The arrangement (1) comprises a fresh steam network (2) and Yankee cylinder (3) which is connected to the fresh steam network (2) in such a way that it is capable of receiving steam from the fresh steam network (2). A hot air hood (4) at the outer circumference (5) of the Yankee cylinder (3) is arranged to let hot air flow against the outer circumference (5) of the Yankee cylinder (3). A first condensate pipe (6) is arranged to remove condensate from the Yankee cylinder (3). A condensate separator (7) is connected to the first condensate pipe (6) such that the condensate separator (7) can receive condensate from the Yankee cylinder (3) and a steam generator (9) is arranged to receive condensate from the condensate separator (7). A pump (10) is arranged to convey condensate from the condensate separator (7) to the steam generator (9) and increase the pressure of the condensate to a level that exceeds the pressure in the Yankee cylinder (3). A waste air conduit (11) is connected to the air hood (4) for conducting waste air out of the air hood (4) and a heat exchanger (12) is arranged to transfer heat energy from the waste air conduit (11) to the steam generator (9) such that condensate in the steam generator (9) is heated and evaporates. A steam conduit (16) is connected to the steam generator (9) such that steam can be passed from the steam generator (9) and subsequently sent to the Yankee cylinder (3). The arrangement further comprises a steam collector tank (18) arranged to receive steam from the steam generator (9). A control system (20) is set to control the pressure in the steam collector tank (18) such that a selected property is kept within predetermined limits. The invention likewise relates to a method of recovering steam during drying of a tissue paper web.

IPC 8 full level

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CPC (source: EP)

D21F 5/181 (2013.01); **D21F 5/20** (2013.01)

Citation (applicant)

- EP 1027495 B1 20040407 - KIMBERLY CLARK CO [US]
- US 8196314 B2 20120612 - MUNCH CHRISTIAN [BR]
- DE 3501584 A1 19850814 - ANDRITZ AG MASCHF [AT]
- WO 2010091765 A1 20100819 - SCA HYGIENE PROD AB [SE], et al
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Citation (search report)

- [AD] WO 2010091765 A1 20100819 - SCA HYGIENE PROD AB [SE], et al
- [A] DE 102010041231 A1 20111124 - VOITH PATENT GMBH [DE]

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