

Title (en)
Drying and desiccating system for plants for producing web-like paper material

Title (de)
Trocknungsanordnung für Anlagen zur Herstellung von Papierbahnen

Title (fr)
Système de séchage pour machines à papier

Publication
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Application
EP 10176140 A 20100910

Priority
IT MI20091582 A 20090916

Abstract (en)
An evaporative drying and desiccating system (10) for a web-like paper material is described. The system (10) comprises at least one first drying device (12), of the pressurised rotating cylinder type fed by steam, on which the web-like paper material to be desiccated is dynamically wound. The cylinder (12) contains a pipe system, for the removal of the condensate, inside it. The system (10) thus comprises at least one second drying device (14), of the hood type, which at least partially covers the cylinder (12) and that comprises at least one first burner (16) capable of producing high temperature dry air. The hood (14) is both capable of blowing the high temperature dry air onto the web-like paper material wound on the cylinder (12), and sucking the moist air released from such a web-like paper material. Positioned along the pipes (26) for releasing the moist air from the hood (14), there are at least one waste heat boiler (34), fed by the moist air released from the web-like paper material and capable of generating high pressure steam for feeding a thermocompressor (36) and a make-up valve (70), which supply steam to the cylinder (12), and at least one auxiliary burner (58), capable of increasing the temperature of the moist air coming from the hood (14). The system (10) is finished off by an exhaust and recirculation fan (32) and by a recirculation and balancing pipe system (72) that, together with the release pipes (26) and through one or more adjustment proportioning valves (64; 38), make it possible to regulate and balance the air flows. It is thus superfluous to use a fuel boiler for feeding the cylinder (12), making it possible moreover, for the thermal conditions of the hood (14) and of the waste heat boiler (34) to be independently regulated, and the amount of energy required by the system (10) is reduced.

IPC 8 full level
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Citation (applicant)
• LU 0003 A
• IT MI20090364 A 20090311
• US 4615122 A 19861007 - SHERROD EARLE H [US], et al

Citation (search report)
• [A] US 4615122 A 19861007 - SHERROD EARLE H [US], et al
• [A] WO 0127388 A1 20010419 - STORA KOPPARBERGS BERGSLAGS AB [SE], et al
• [A] WO 9957367 A1 19991111 - VALMET CORP [FI], et al
• [A] WO 2008149249 A1 20081211 - HAYAT KIMYA SANAYI ANONIM SIRK [TR], et al

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