

Title (en)
THE DYEING MACHINE FOR APPLYING TREATMENT AGENT TO FABRIC

Title (de)
FÄRBEMASCHINE ZUM AUFTRAGEN EINES BEHANDLUNGSMITTELS AUF EIN GEWEBE

Title (fr)
MACHINE DE TEINTURE DESTINEE A APPLIQUER UN AGENT DE TRAITEMENT A UN TISSU

Publication
EP 1022371 A1 20000726 (EN)

Application
EP 97917988 A 19970429

Priority
CN 9700036 W 19970429

Abstract (en)
A spray dyeing apparatus includes a fabric storage tank and a fabric guide tube disposed above and connected to the fabric storage tank to define a continuous loop for fabric. A pump and a blower are provided to pressurize and convey dye and air into the fabric guide tube via spray nozzles disposed on upper side of the fabric guide tube and directing nozzles arranged on a bottom support plate of the fabric guide tube. The bottom support plate has a support surface having a sufficient width to allow the breadth of the fabric to be substantially fully expanded in moving through the fabric guide tube. The directing nozzles are provided on the support plate in a spaced manner to generate high speed air streams in the downstream direction which are confined above the support plate to have the fabric floating above the support plate and moving in the downstream direction. The high speed air streams also create a low pressure zone under the fabric so as to induce a violent vibration on the fabric by means of the air streams and the pressure difference between the upper and lower sides of the fabric. The spray nozzles are provided on the upper side of the fabric guide tube to spray atomized dye onto the expanded fabric. <IMAGE>

IPC 1-7
D06B 1/02; **D06B 1/08**; **D06B 3/24**; **D06B 5/02**

IPC 8 full level
D06B 1/02 (2006.01); **D06B 1/08** (2006.01); **D06B 3/24** (2006.01); **D06B 3/28** (2006.01); **D06B 5/02** (2006.01)

CPC (source: EP)
D06B 3/28 (2013.01); **D06B 1/02** (2013.01)

Cited by
EP2594673A4; EP1616988A1; CN105332203A; WO2012006759A1

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IT LI LU NL PT SE

DOCDB simple family (publication)
EP 1022371 A1 20000726; **EP 1022371 A4 20010328**; **EP 1022371 B1 20031112**; AT E254199 T1 20031115; AU 2631197 A 19981124; AU 726841 B2 20001123; CA 2288214 A1 19981105; CA 2288214 C 20040302; DE 69726198 D1 20031218; DE 69726198 T2 20040909; DK 1022371 T3 20040216; ES 2210515 T3 20040701; JP 2000511246 A 20000829; JP 3216648 B2 20011009; PT 1022371 E 20040430; WO 9849383 A1 19981105

DOCDB simple family (application)
EP 97917988 A 19970429; AT 97917988 T 19970429; AU 2631197 A 19970429; CA 2288214 A 19970429; CN 9700036 W 19970429; DE 69726198 T 19970429; DK 97917988 T 19970429; ES 97917988 T 19970429; JP 54645298 A 19970429; PT 97917988 T 19970429