

Title (en)

Method and device for dyeing a textile substrate in at least one supercritical fluid

Title (de)

Verfahren zum Färben eines textilen Substrates in mindestens einem überkritischen Fluid sowie Färbevorrichtung

Title (fr)

Procédé et dispositif pour la teinture d'un substrat textile dans au moins un fluide supercritique

Publication

EP 1063338 B1 20020731 (DE)

Application

EP 00109392 A 20000503

Priority

DE 19928405 A 19990622

Abstract (en)

[origin: EP1063338A2] Dyeing system using a supercritical fluid divides the required dyestuff volume into portions to be fed separately into the supercritical fluid flow until it is all dissolved or dispersed. To dye textile substrate materials in a supercritical fluid, preferably dyeing yarn bobbins in supercritical carbon dioxide, the required volume of dyestuff is divided into a number of part volumes. Each part volume is brought into contact with the supercritical fluid for a sufficient time span until it is fully dissolved or dispersed within it. The process is repeated for further dyestuff part volumes until all the required dyestuff has been taken up by the supercritical fluid. The required dyestuff volume is divided into 5-200 portions, and especially 20-90 lots. Each dyestuff part volume is introduced into the flow of supercritical fluid, which is recirculated in time units until all the required dyestuff has been taken up by it. The dyestuff is brought into contact with the flow of supercritical fluid directly downstream of the recirculating pump. The dyestuff portions are brought to the required temperature and pressure conditions, to be mixed with the supercritical fluid. An Independent claim is included for a dyestuff mixing station (A) with a dyestuff feed (1) between one point where a dyestuff take-off section (2) swings and is free and a second point where it is in contact with the supercritical fluid, and vice versa.

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D06B 23/20

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CPC (source: EP US)

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Cited by

CN108425196A; EP1164214A3; CN104178948A; CN113790031A

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