

Title (en)

Dyeing or bleaching apparatus for yarn packages

Title (de)

Vorrichtung zum Färben oder Bleichen von Garnspulen

Title (fr)

Dispositif pour la teinture ou le blanchiment des bobines de fil textile

Publication

**EP 1489215 A3 20050921 (EN)**

Application

**EP 04076647 A 20040604**

Priority

IT MI20031209 A 20030616

Abstract (en)

[origin: EP1489215A2] Dyeing or bleaching apparatus of yarns wound on reels or similar packages, comprising a plurality of small vertical dyeing boilers (15) arranged on a single circumference each suitable for receiving a mobile reel-holding shaft (13) able to be removed at the same time as the others for the subsequent centrifugal water-removal and drying operations, functioning in a reduced bath able to be impregnated even at fractional capacities with a constant bath ratio and productivity. <IMAGE>

IPC 1-7

**D06B 5/16**

IPC 8 full level

**D06B 5/16** (2006.01)

CPC (source: EP US)

**D06B 5/16** (2013.01 - EP US); **D06B 15/10** (2013.01 - EP); **D06B 21/00** (2013.01 - EP); **D06B 23/04** (2013.01 - EP)

Citation (search report)

- [DY] WO 02095113 A1 20021128 - MASTER S A S DI RONCHI FRANCES [IT], et al
- [Y] JP S4987869 A 19740822
- [DA] WO 02095114 A1 20021128 - MASTER S A S DI RONCHI FRANCES [IT], et al
- [A] DE 2239369 A1 19730222 - FRAUCHIGER AG MASCHINENFABRIK
- [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 057 (C - 0684) 2 February 1990 (1990-02-02)

Cited by

CN102776736A; ITBG20110009A1; GB2404199B

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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