

Title (en)

DEVICE FOR REPLACING EMPTY CANS BY FULL CANS IN AN AUTOMATIC SPINNING MACHINE

Publication

**EP 0360053 B1 19930811 (DE)**

Application

**EP 89116160 A 19890901**

Priority

DE 3831640 A 19880917

Abstract (en)

[origin: JPH02160937A] PURPOSE: To automatically replace cans and enhance the efficiency of a spinning frame by installing a means for simultaneously conveying empty cans with full cans and providing a can replacement apparatus capable of traveling on a track along a spinning part. CONSTITUTION: This unit is capable of confirming that a spinning part 1 has cans 6 which are completely emptied or nearly emptied and requires can replacement during the passage of an automatic can replacement apparatus 24 capable of traveling through the spinning part 1 or during the stop thereof in front of the spinning part 1, instantaneously starting the replacement of the cans 6 by the can replacement apparatus 24 when the cans 6 are emptied and the spinning part 1 is stopped and instantaneously carrying out the can replacement when the spinning part 1 is rotated because the cans 6 are not completely emptied after the interruption of the spinning process. The can replacement apparatus 24 is equipped with sensors 36 and 37 for distinguishing and confirming the empty cans 6 from end cans 20 and a device 32 for delivering the cans 6 to a gap on a conveying passage 17 and delivering the cans 20 to the spinning part 1.

IPC 1-7

**B65H 67/02**; **D01H 9/00**

IPC 8 full level

**B65H 67/04** (2006.01); **B65H 67/02** (2006.01); **D01H 9/00** (2006.01)

CPC (source: EP US)

**D01H 9/008** (2013.01 - EP US)

Designated contracting state (EPC)

CH DE FR IT LI

DOCDB simple family (publication)

**EP 0360053 A1 19900328**; **EP 0360053 B1 19930811**; DE 3831640 A1 19900322; DE 58905240 D1 19930916; JP H02160937 A 19900620; US 4972669 A 19901127

DOCDB simple family (application)

**EP 89116160 A 19890901**; DE 3831640 A 19880917; DE 58905240 T 19890901; JP 24029789 A 19890918; US 40045589 A 19890830