

Title (en)

APPARATUS FOR INSERTING OBJECTS INTO A FILTER ROD

Title (de)

VORRICHTUNG ZUM EINLEGEN VON OBJEKTEN IN EINEN FILTERSTAB

Title (fr)

DISPOSITIF D'INSERTION D'OBJETS DANS UNE TIGE DE FILTRE

Publication

EP 3064076 B1 20220817 (DE)

Application

EP 16154008 A 20160203

Priority

US 201514620713 A 20150212

Abstract (en)

[origin: JP2016146826A] PROBLEM TO BE SOLVED: To provide an apparatus and method for inserting objects into a filter rod. SOLUTION: The apparatus can include: a first conduit adapted to convey a plurality of the objects in series; a first escapement having a first inlet and a first outlet connected by a first channel, where the first inlet is connected to the first conduit; a first singulation drum having an outer periphery defining a first row of first pockets adapted to hold the objects, where the first singulation drum is adapted to rotate about a first axis to successively move the first pockets into a supply part in the first outlet; and at least one first air supply source that conveys the objects from the first inlet to the first outlet, and successively into the first pockets of the first singulation drum. Other details and methods of inserting objects into a filter rod are also discussed. SELECTED DRAWING: Figure 9

IPC 8 full level

A24D 3/02 (2006.01); **A24D 3/06** (2006.01)

CPC (source: CN EP US)

A24C 5/002 (2013.01 - US); **A24C 5/02** (2013.01 - US); **A24C 5/32** (2013.01 - US); **A24D 3/02** (2013.01 - CN); **A24D 3/0216** (2013.01 - EP US); **A24D 3/025** (2013.01 - US); **A24D 3/0287** (2013.01 - EP US); **A24D 3/061** (2013.01 - EP US); **A24D 3/063** (2013.01 - US)

Citation (opposition)

Opponent : G.D S.p.A.

- JP H06135542 A 19940517 - JAPAN TOBACCO INC
- EP 2636322 A2 20130911 - HAUNI MASCHINENBAU AG [DE]
- US 2014239006 A1 20140828 - GARTHAFFNER MARTIN T [US], et al
- WO 2014187839 A1 20141127 - PHILIP MORRIS PRODUCTS SA [CH]
- DE 1243074 B 19670622 - OLIN MATHIESON
- WO 2010115829 A1 20101014 - BRITISH AMERICAN TOBACCO CO [GB], et al

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DOCDB simple family (publication)

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EP 16154008 A 20160203; CN 201610085703 A 20160215; JP 2016021434 A 20160208; PL 16154008 T 20160203; US 201514620713 A 20150212