

Title (en)

ASEPTICALLY WORKING PACKAGING MACHINES AND METHOD FOR PRE-STERILIZING THEM

Title (de)

ASEPTISCH ARBEITENDE VERPACKUNGSMASCHINEN UND VERFAHREN ZU DEREN VORSTERILISATION

Title (fr)

MACHINES D'EMBALLAGE A FONCTIONNEMENT ASEPTIQUE ET PROCEDE DE LEUR PRESTERILISATION

Publication

EP 1152946 A1 20011114 (DE)

Application

EP 00993397 A 20001211

Priority

- DE 0004415 W 20001211
- DE 19960155 A 19991214

Abstract (en)

[origin: WO0144053A1] The invention relates to aseptically working packaging machines and to a method for pre-sterilizing them. The aim of the invention is to simultaneously introduce under pressure the steam and the sterilizing agent at a single site into a sterile air feed channel (2) that leads to the sterile chamber (1) of the packaging machine. To this end, a mixing nozzle (3) is located in the air feed channel directly downstream of a sterile air filter (6). For the purpose of pre-sterilization, the treating elements disposed in the sterile chamber that are possibly still hot are brought to a temperature of less than 120 DEG C before the actual pre-sterilization begins. The steam and the sterilizing agent are mixed by means of a mixing nozzle (3) to which both components are fed. The steam is fed to the nozzle via a pressure-reducing valve (19) and an adjoining device (10) that regulates the steam quantity. The sterilizing agent is fed to the nozzle (3) from a sterilizing agent reservoir (12) that is maintained at a constant pressure. During the initial phase of the pre-sterilization, the supply of sterile air to the sterile air filter is shortly interrupted in order to generate a partial reflux of the atomized steam/sterilizing agent mixture upstream towards the sterile air filter (6).

IPC 1-7

B65B 55/02; **B65B 55/10**

IPC 8 full level

B65B 55/02 (2006.01); **B65B 55/10** (2006.01)

CPC (source: EP US)

B65B 55/025 (2013.01 - EP US); **B65B 55/103** (2013.01 - EP US)

Citation (search report)

See references of WO 0144053A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0144053 A1 20010621; DE 19960155 A1 20010621; DE 50006955 D1 20040805; EP 1152946 A1 20011114; EP 1152946 B1 20040630; ES 2218282 T3 20041116; US 2002134051 A1 20020926; US 6622457 B2 20030923

DOCDB simple family (application)

DE 0004415 W 20001211; DE 19960155 A 19991214; DE 50006955 T 20001211; EP 00993397 A 20001211; ES 00993397 T 20001211; US 91341501 A 20010813