

Title (en)

Hot air aseptic packaging system.

Title (de)

System zum keimfreien Verpacken mittels Heissluft.

Title (fr)

Système de conditionnement aseptique avec de l'air chaud.

Publication

EP 0059097 A2 19820901 (EN)

Application

EP 82300894 A 19820222

Priority

US 23676681 A 19810223

Abstract (en)

Containers (19) (made of, for example, metal, glass, plastic or fiber) are sterilized in a sterilizer (21) of packaging apparatus having a helical or spiral conveyor belt (36) within an insulated casing, (31) through which air above atmospheric pressure at up to about 500 DEG F (260 DEG C) is circulated by means of a heater (46) and blower (47), in a recirculation path. The containers then travel along a straight-line encased conveyor (22) where sterile air above atmospheric pressure prevents ingress of non-sterile ambient air. During part of the path through the straight-line conveyor, the containers are driven by a helix (71) which forces the containers into close proximity. Pre-sterilized, preferably cooled, product is delivered into the containers preferably through a curtain, slit-type filler (111). The speed of the containers is timed so that the desired product volume is delivered into the containers. Thereafter, filled containers are accepted by a container closing machine (24). Container lids (18) or covers are sterilized in a section of the apparatus where lids are moved along a conveyor and sterile air which has been heated is forced by a blower (161) into the lid sterilizer section. The lids then travel up a tunnel at greater than atmospheric pressure, where they are cooled and delivered to the closing machine. The closing machine applies the sterile lids to the containers at greater than atmospheric pressure.

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