

Title (en)

A MODULAR CONTAMINATION-AVOIDING CAP DELIVERY SYSTEM FOR ATTACHMENT TO NECK OF A CONTAINER

Title (de)

MEHRTEILIGER VERUNREINIGUNGSVERMEIDENDER KAPPENSPENDER ZUR BEFESTIGUNG AN EINER BEHÄLTERÖFFNUNG

Title (fr)

SYSTEME VERSEUR MODULAIRE A CAPSULE ANTI-CONTAMINATION SE MONTANT SUR LE GOULOT D'UN RECIPIENT

Publication

EP 1409362 A1 20040421 (EN)

Application

EP 01900578 A 20010117

Priority

- IB 0100038 W 20010117
- US 51169400 A 20000223
- US 24117899 A 19990201

Abstract (en)

[origin: WO0162618A1] A modular cap delivery system (200) comprising an elastomeric seal (110) and conformably engaging seat (100) can be affixed to or integrated in the neck of a container such as a bottle, flexible bag, tube, or any container having a neck and holding a quantity of a flowable medium. The configuration of the seal and seat eliminate the influx of air, airborne pathogens, or any contaminant into the container of flowable medium to which the delivery device is attached, thereby maintaining the integrity and sterility of a flowable material, even when challenged by direct contact through immersion in suspensions of bacteria or viruses. The delivery device is highly scalable in size, can work for viscous fluids that are difficult to flow, and enables a flowable material to be reformulated without preservatives or antioxidants. This provides the advantage of an enhanced therapeutic effect for many medications, particularly eye care solutions. The sterility of a product such as Ultra High Temperature (UHT) milk and other dairy products can be maintained without the need for refrigeration. When used as a cap for fitment over a bottle of wine, it can substantially prevent oxidation and degradation of wine after the container is opened. The delivery system also can be used to maintain the carbonation of soft drinks, beer, or the like, even over repeated usage thereby prolonging the useful life of a carbonated beverage substantially to that of the beverage's shelf life.

IPC 1-7

B65D 47/20

IPC 8 full level

B65D 47/20 (2006.01)

CPC (source: EP)

B65D 47/2081 (2013.01)

Citation (search report)

See references of WO 0162618A1

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 0162618 A1 20010830; AR 027953 A1 20030416; AU 2541201 A 20010903; EP 1409362 A1 20040421; TW 557280 B 20031011

DOCDB simple family (application)

IB 0100038 W 20010117; AR P010100808 A 20010222; AU 2541201 A 20010117; EP 01900578 A 20010117; TW 90104093 A 20010222