

Title (en)

SELF-SEALING BALLOON AND METHOD OF MANUFACTURE

Title (de)

SELBSTDICHTENDER BALLON UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

BALLONNET AUTO-OBTURANT ET PROCÉDÉ DE FABRICATION

Publication

EP 3703837 A1 20200909 (EN)

Application

EP 17930994 A 20171128

Priority

- US 201715798309 A 20171030
- US 2017063341 W 20171128

Abstract (en)

[origin: WO2019089062A1] A self-sealing balloon comprising a tubular balloon neck segment (620, 1420) extending from an opening of a balloon gas retaining expansion cavity (610, 1410). A bead of moldable adhesive material is applied in a ring (571, 771, 971, 1391) about an interior circumference of a neck portion (620, 1420) of the balloon (600, 1400) forming a dispensed adhesive roll (571, 771, 971, 1391). The dispensed adhesive roll (571, 771, 971, 1391) is at least partially encapsulated within an adhesive staging segment (172, 624, 1424). The adhesive staging segment (172, 624, 1424) can be encased within a rolled lip bead (624, 1424) by any suitable process. The rolling process aids in forming the ring-shaped adhesive. In use, the balloon would be inflated. The lip bead would be unrolled, exposing the adhesive ring (571, 771, 971, 1391). The moldable adhesive (571, 771, 971, 1391) would be compressed forming a seal, entrapping pressurized air within the balloon gas retaining expansion cavity (610, 1410). This provides a low cost, simple self-sealing solution for a balloon.

IPC 8 full level

A63H 27/00 (2006.01); **A63H 27/10** (2006.01)

CPC (source: EP)

A63H 27/10 (2013.01); **A63H 2027/1025** (2013.01); **A63H 2027/1033** (2013.01); **A63H 2027/1041** (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2019089062 A1 20190509; AU 2017437551 A1 20200618; AU 2017437551 B2 20240328; EP 3703837 A1 20200909; EP 3703837 A4 20211208; MX 2020004622 A 20200813

DOCDB simple family (application)

US 2017063341 W 20171128; AU 2017437551 A 20171128; EP 17930994 A 20171128; MX 2020004622 A 20171128