

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 A4 20211208 (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 27/10** (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)

Citation (search report)

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- [XI] US 3108396 A 19631029 - ISIDORE DORMAN
- [A] GB 2200299 A 19880803 - LANG PHILIP EDWARD
- See also references of WO 2019089062A1

Designated contracting state (EPC)

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