

Title (en)

Flexible switch members for hand activation handpiece switches

Title (de)

Flexibles Schaltglied für handbetätigte Schalter

Title (fr)

Élément de commutation flexible pour des commutateurs actionnés manuellement

Publication

EP 1199733 A3 20040324 (EN)

Application

EP 01308926 A 20011019

Priority

- US 24227200 P 20001020
- US 87455601 A 20010604

Abstract (en)

[origin: EP1199733A2] Methods of controlling fluid flow (e.g., flow of liquids, water vapor and gases) through switch members, e.g., switch buttons, which are used to seal an interior cavity of a surgical handpiece are provided. The switch members provide improved sealing properties which prevent gas and water vapor transmission across the switch member and into and out of the sealed internal switch chamber. The switch members are also resistant to puncture due to striking by tools or cleaning instruments, or the like. <IMAGE>

IPC 1-7

H01H 9/00

IPC 8 full level

A61B 17/22 (2006.01); **A61B 18/00** (2006.01); **H01H 9/04** (2006.01); **H01H 13/82** (2006.01)

CPC (source: EP)

H01H 9/04 (2013.01); **H01H 9/047** (2013.01); **H01H 13/82** (2013.01); **H01H 2300/014** (2013.01)

Citation (search report)

- [YXA] US 5226904 A 19930713 - GENTELIA JOHN [US], et al
- [Y] US 4373124 A 19830208 - FRAME NORMAN J

Cited by

US11195676B2; WO2017184107A1

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)

EP 1199733 A2 20020424; **EP 1199733 A3 20040324**; **EP 1199733 B1 20061227**; CA 2359556 A1 20020420; CA 2359556 C 20101012; DE 60125488 D1 20070208; DE 60125488 T2 20071025; DE 60143551 D1 20110105; ES 2278697 T3 20070816; JP 2002248111 A 20020903; JP 4223213 B2 20090212

DOCDB simple family (application)

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