

Title (en)  
SURGICAL INSTRUMENT

Title (de)  
CHIRURGISCHES INSTRUMENT

Title (fr)  
INSTRUMENT CHIRURGICAL

Publication  
**EP 2582309 A1 20130424 (DE)**

Application  
**EP 11725476 A 20110617**

Priority  
• DE 202010008674 U 20100930  
• DE 202010005676 U 20100618  
• EP 2011060111 W 20110617

Abstract (en)  
[origin: WO2011157824A1] The invention relates to a surgical instrument (20), comprising a pull/push element (2) guided in a sleeve (1) for transmitting a pulling/pushing force from an actuating device (3) disposed at one end of the sleeve (1) to a loop (4) disposed at the other end of the sleeve in order to move the loop (4) from a storage position, in which the loop (4) lies in an extended manner inside the sleeve (1), into a usage position, in which the expanded opening (5) of the loop (4) is located in front of the sleeve (1), and back into the storage position, wherein the loop (4) comprises two expansion limbs (6), which in the usage position are located partially in and in front of the sleeve (1) and together have an expanded V shape and which are more flexurally rigid at least in a direction that is transverse to the opening plane (5') than a loop arc (7) connecting the respective free ends (61) of the expansion limbs to each other, and wherein the pull/push element (2) is electrically conductive. For an advantageous development, at least one first longitudinal sub-section (21) of the loop arc (7), which in the storage position is located on the one longitudinal side of the loop (4), comprises an electrically insulating sheathing (23) or consists of an electrically insulating material, and at least one second longitudinal sub-section (22) of the loop arc (7), which in the storage position is located on the other longitudinal side of the loop (4), is electrically conductive, comprises no electrically insulating sheathing and is electrically conductively connected to the pull/push element (2) by means of at least one expansion limb (6).

IPC 8 full level  
**A61B 17/3205** (2006.01)

CPC (source: EP KR)  
**A61B 18/14** (2013.01 - EP); **A61B 18/1492** (2013.01 - KR); **A61B 18/1492** (2013.01 - EP); **A61B 2018/00083** (2013.01 - EP KR); **A61B 2018/00214** (2013.01 - EP KR); **A61B 2018/141** (2013.01 - EP KR)

Citation (search report)  
See references of WO 2011157824A1

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 2011157824 A1 20111222**; DE 202010008674 U1 20111129; EP 2582309 A1 20130424; JP 2013529479 A 20130722; KR 20130137117 A 20131216; RU 2013102301 A 20140727

DOCDB simple family (application)  
**EP 2011060111 W 20110617**; DE 202010008674 U 20100930; EP 11725476 A 20110617; JP 2013514733 A 20110617; KR 20137001196 A 20110617; RU 2013102301 A 20110617