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(54) Laparoscopic bipolar electrosurgical instrument

(57) A laparoscopic bipolar electrosurgical instrument for sealing tissue includes a handle (14) having an elongated tube (13) affixed thereto and first (15) and second jaw (16) members. Each of the first and second jaw members include an electrically conductive sealing surface (39,40). The opposable sealing surfaces include a non-stick material for reducing tissue adhesion during the sealing process. The first and second jaw members are adapted to connect to a source of electrosurgical energy such that the opposable sealing surfaces are capable of conducting electrosurgical energy through tissue held therebetween. In addition, a stop (90) is disposed on one of the opposable sealing surfaces for maintaining a minimum separation distance between the opposable sealing surfaces; a ratchet (60) is disposed on one of a fixed (50) and a movable (52) handle, and at least one complementary interlocking mechanical interface (62) is disposed on the other of the fixed and movable handles. The ratchet and the complementary interlocking mechanical interface provide at least one interlocking position to maintain a closure force in the range of about 3 kg/cm^2 to about 16 kg/cm^2 between opposable sealing surfaces.

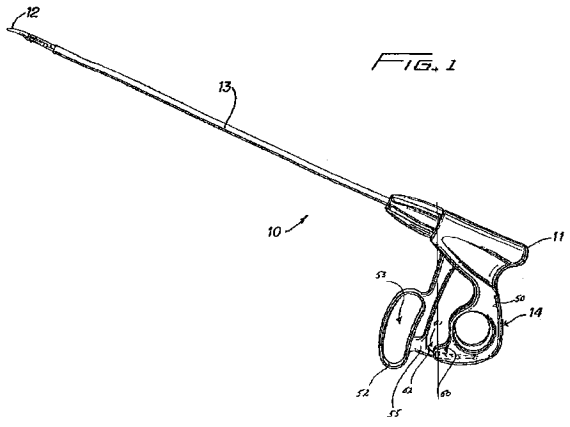

FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 06 00 8779

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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TECHNICAL FIELDS SEARCHED (IPC)

A61B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	20 November 2006	Storer, John

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 06 00 8779

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	腹腔镜双极电外科仪器		
公开(公告)号	EP1683496A3	公开(公告)日	2006-12-27
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申请(专利权)人(译)	SHERWOOD SERVICES AG		
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优先权	10/164654 2002-06-06 US 11/516480 2005-10-05 US		
其他公开文献	EP1683496A2 EP1683496B1		
外部链接	Espacenet		

摘要(译)

用于密封组织的腹腔镜双极电外科器械包括手柄，手柄具有固定到其上的细长管。该管包括连接到其远端的第一和第二钳口构件，钳口构件可从第一位置移动，其中第一和第二钳口构件相对于彼此以间隔关系设置到至少一个后续位置以抓取组织其间。第一和第二钳口构件中的每一个包括导电密封表面，第一钳口构件的导电密封表面基本上与第二钳口构件的导电密封表面相对。手柄包括固定手柄和可动手柄，可动手柄可相对于固定手柄移动，以实现第一和第二钳夹构件从第一位置到至少一个后续位置的运动用于抓取组织。可相对的密封表面包括用于在密封过程中减少组织粘附的不粘材料。第一和第二钳口构件适于连接到电外科能量源，使得可相对的密封表面能够通过保持在其间的组织传导电外科能量。另外，在一个可重复使用的密封表面上设置一个止动件，用于保持可相对应的密封表面之间的最小间隔距离;棘轮设置在固定和可动手柄中的一个上，并且至少一个互补的互锁机械接口设置在固定和可动手柄中

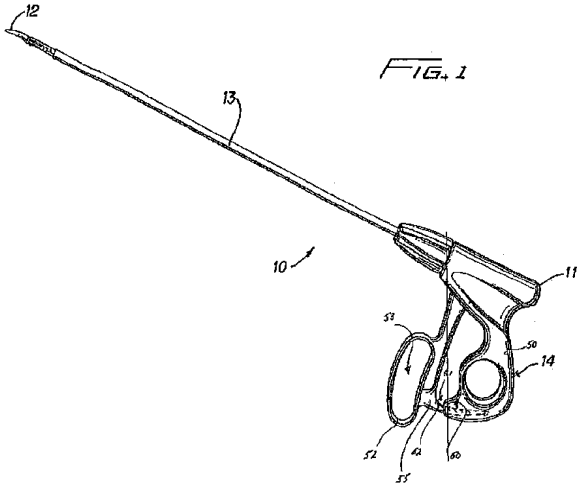

FIG. 1

的另一个上。棘轮和互补的互锁机械接口提供至少一个互锁位置，以在相对的密封之间保持约3kg / cm2至约16kg / cm2的闭合力。表面。