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(54) Curved laparoscopic scissor having two arcs of curvature

(57) A laparoscopic surgical scissors for cutting tissue is disclosed. The laparoscopic surgical scissors has a handle body assembly having an actuation member moveable toward and away from the handle body assembly. An elongated shaft having a proximal and a distal end that define a longitudinal axis is connected to the handle body assembly at the proximal end of said shaft. A pair of cutting blades have a first blade member and a second blade member that are co-operably connected about a common pivot member adjacent to the distal end of the elongated shaft. The common pivot member defines a common pivot axis perpendicular to the elongated shaft. The first blade member has a first cutting edge and the second blade member has a second cutting edge facing the first cutting edge. The blade members have a single point of blade contact translating proximally and distally as the blade members open and close in response to movement of the actuation member away from and toward the handle body assembly. Each of the blade members defines a curvature along the shaft longitudinal axis and each of the curvatures has a proximal end and a distal end. A proximal arc of curvature and a distal arc of curvature define the curvature of each of the blade members. The proximal arc of the first blade member has a first radius of curvature and the distal arc of the first blade member has a second radius of curvature. The proximal arc of the second blade member has a third radius of curvature and the distal arc of the second blade member has a fourth radius of curvature. Each of the radii of curvature is taken through a common centerline parallel to the common pivot axis, and each of the radii of curvature is different from each other.

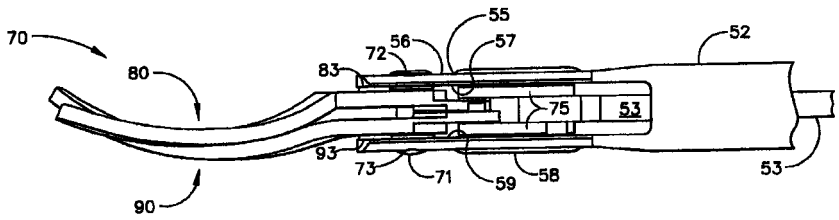

FIG. 7

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EUROPEAN SEARCH REPORT

Application Number
EP 00 30 5734

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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TECHNICAL FIELDS SEARCHED (Int.Cl.7)

A61B
B26B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
BERLIN	26 January 2001	Ducreau, F

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 00 30 5734

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26-01-2001

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专利名称(译)	弯曲的腹腔镜剪刀具有两个弧形弧		
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发明人	MEASAMER, JOHN P. KOCH, ROBERT L. SAMBI, NARINDERJIT S.		
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代理机构(译)	MERCER，CHRISTOPHER PAUL		
优先权	09/350079 1999-07-08 US		
其他公开文献	EP1066798B1 EP1066798A2		
外部链接	Espacenet		

摘要(译)

公开了一种用于切割组织的腹腔镜手术剪刀。腹腔镜手术剪刀具有手柄本体组件，该手柄本体组件具有可朝向和远离手柄本体组件移动的致动构件。具有限定纵向轴线的近端和远端的细长轴在所述轴的近端处连接到手柄主体组件。一对切割刀片具有第一刀片构件和第二刀片构件，所述第一刀片构件和第二刀片构件围绕与所述细长轴的远端相邻的公共枢轴构件共同操作地连接。公共枢轴构件限定了垂直于细长轴的公共枢轴。第一刀片构件具有第一切割刃，并且第二刀片构件具有面向第一切割刃的第二切割刃。当刀片构件响应于致动构件远离和朝向手柄主体组件的运动而打开和关闭时，刀片构件具有单点刀片接触向近侧和远侧平移。每个叶片构件限定沿着轴纵向轴线的曲率，并且每个曲率具有近端和远端。近端曲率弧和远端曲率弧限定每个叶片构件的曲率。第一叶片构件的近侧弧具有第一曲率半径，并且第一叶片构件的远侧弧具有第二曲率半径。第二叶片构件的近侧弧具有第三曲率半径，并且第二叶片构件的远侧弧具有第四曲率半径。每个曲率半径通过平行于公共枢轴线的公共中心线取得，并且每个曲率半径彼此不同。

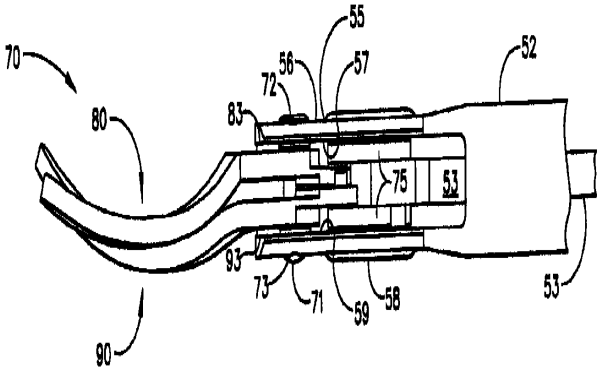

FIG. 7