

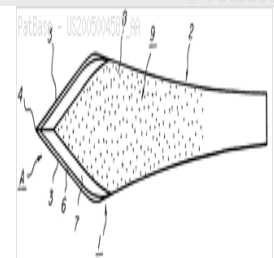
1) Family number: 31422928 (US2005004587A)

MEDICAL KNIFE

Abstract: Source: US2005004587A A medical knife has a cutting edge formed along the outer edge of a blade portion, and the thickness of the lower portion located under a boundary acting as a surface including the cutting edge is made thinner than that of an upper portion located on the boundary, or a lower surface is composed of the surface including the cutting edge. The surface of the upper portion on the above surface including the cutting edge is composed of a first slanting surface constituting the cutting edge, a second reflecting surface, and a flat surface composed of a non-reflecting surface as well as the lower portion has a lower slanting surface 10 and a lower flat surface 11 each composed of a reflecting surface. With the above arrangement, the medical knife can reduce the amount of reflected light when an operation such as an ophthalmic operation is executed under a microscope.

Probable Assignee: MANI INC

Earliest Publication Date: 20041229



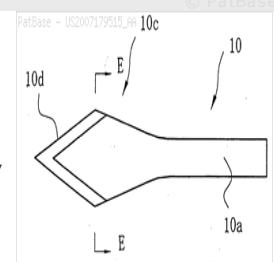
2) Family number: 34361800 (US2007179515A)

MEDICAL KNIFE

Abstract: Source: US2007179515A A work 10 made of a hard wire rod of austenitic-stainless steel is pressed at a rolling reduction of 60 percent or greater, into a paddle-shaped end 10 b, and then subjected to work hardening, making the hardness of the end 10 b 550 Hv or greater. Afterwards, the paddle-shaped end 10 b is cut through machining, forming a main body 10 c of a medical knife and cutting blades 10 d. As a result, a medical knife, which is easily fabricated, is corrosion resistant, has sufficient hardness and sharpness, high toughness preventing cracks, can be provided.

Probable Assignee: MANI INC

Earliest Publication Date: 20070404



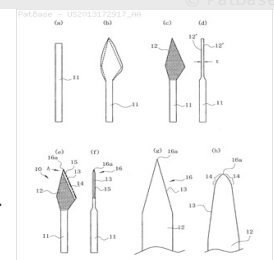
3) Family number: 50759791 (US2013172917A)

MEDICAL KNIFE

Abstract: Source: US2013172917A [Problem] Because the knife edge of medical knives such as straight knives manufactured with austenite stainless steel is thin and sharp, there is the problem that the knife edge bends too easily when making incisions in the cornea, sclera, etc. during ophthalmologic surgery. The invention provides a medical knife capable of increasing the strength of the thin, sharp knife edge and preventing the reduction of sharpness. [Solution] This medical knife has a flat cutting part and an inclined surface formed along the border of said cutting part. By electrolytic polishing or chemical polishing of the inclined surface, a convexly curved cutting edge is formed on at least the edge of the inclined surface of the knife. The knife edge has a rounded configuration. The knife edge being rounded increases the thickness of the knife edge, increases the strength thereof and hinders bending.

Probable Assignee: MANI INC

Earliest Publication Date: 20120308



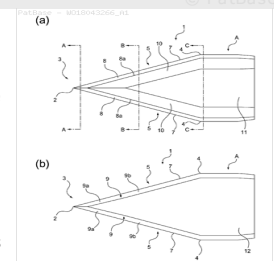
4) Family number: 68806416 (WO18043266A1)

KNIFE FOR USE IN MEDICAL TREATMENT

Abstract: The purpose of the present invention is to provide a knife for use in medical treatment, with which it is possible to form an incision which is strongly self-closing. Provided is a knife (A), in which a planar projection shape of a blade part (1) is formed in an approximately rhomboid shape, which comprises: a leading end part (3) which includes a pointed end (2) which is formed in a leading end portion and the vicinity of the pointed end (2); a maximum width part (4) which is the widest part; and lateral surface parts (5) which are formed between the leading end part (3) and the maximum width part (4). With a virtual plane (7a) as a boundary, said virtual plane (7a) including edges (7) which are formed along the outer circumference of the blade part (1), an obverse-side bevel (8) which configures the edges (7) is formed on the obverse side and a reverse-side bevel (9) which configures the edges (7) is formed on the reverse side. A ratio in the leading end part (3), of an angle beta which is formed by the virtual plane (7a) and a rear-side bevel (9a) to an angle alpha which is formed by the virtual plane (7a) and the obverse-side bevel (8), is greater than a ratio in the lateral surface parts (5), of an angle gamma which is formed by the virtual plane (7a) and a rear-side bevel to the angle alpha which is formed with the obverse-side bevel (8).

Probable Assignee: MANII KK

Earliest Publication Date: 20180308



5) Family number: 24130013 (US2003004527A)

MEDICAL BLADED DEVICE

Earliest Publication Date: 20021128