

Japan Patent Office

Patent Laying-Open Gazette

Patent Laying-Open No.: 2001-353215

Laying-Open Date: December 25, 2001

Int.Cl.⁷: A61M 1/14, 5/168

Identifying Mark: 595

FI: A61M 1/14, 5/14

Theme Code (Reference): 595 4C066, 417 4C077

Request for Examination: Not Requested

Number of Claims: 3

Filing Form: OL

(7 pages in total)

Patent Application No.: 2000-176321

Filing Date: June 13, 2000

Applicant: Nikkiso Co., Ltd. (000226242)
43-2, Ebisu 3-chome,
Shibuya-ku, Tokyo

Inventor: Katsumi ISOU

Inventor:

c/o Nikkiso Co., Ltd.
Shizuoka Plant
Shizutani 498-1, Haibara-cho,
Haibara-gun, Shizuoka

Sumio Ohara

c/o Nikkiso Co., Ltd.

Shizuoka Plant

Shizutani 498-1, Haibara-cho,
Haibara-gun, Shizuoka

Agent:

Patent Attorney

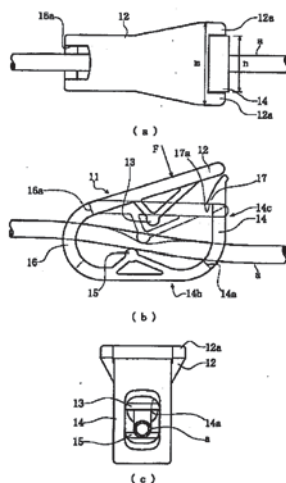
Takao KOSHIKAWA (100095614)

[Title of the Invention] CLAMPING DEVICE FOR MEDICAL FLEXIBLE TUBE

[Abstract]

[Object] Provided is a clamping device for a medical flexible tube that can prevent a widthwise displacement of one end portion in clamping while maintaining a clamping workability, and can block a fluid flow without carefully performing a clamping work.

[Solution Means] A clamping device 11 for a medical flexible tube includes an end portion 12 with a first convex portion 13 formed therein, the other end portion 14 with a second convex portion 15 formed therein, a middle portion 16 that is continuous with the end portion 12 and the other end portion 14, and a stopper 17 with which the end portion 12 is engaged, wherein a projection 12a is provided for guiding the one end portion 12 to the stopper 17.



[Claims]

[Claim 1] A clamping device for a medical flexible tube, comprising:

one end portion in which a first convex portion is formed;

the other end portion in which a second convex portion opposed to the first convex portion is formed;

a middle portion that is continuous with the one end portion and the other end portion;

an engaging portion that is formed in the other end portion and with which the one end portion is engaged; and

insertion holes that are formed in the other end portion and the middle portion, allowing a flexible tube to be inserted therethrough, wherein

when the middle portion is bent to engage the one end portion with the engaging portion, the first convex portion and the second convex portion come close to each other to clamp the flexible tube inserted through the two insertion holes, thereby blocking a fluid flow there, characterized in that

a guide portion is provided for guiding the one end portion to the engaging portion.

[Claim 2] The clamping device for a medical flexible tube according to claim 1, characterized in that the guide portion includes projections that protrude from both ends at a tip of the one end portion, and the other end portion is inserted between the projections.

[Claim 3] The clamping device for a medical flexible tube according to claim 1, characterized in that the guide portion is a guide hole formed in the one end portion, and the other end portion is inserted through the guide hole.

[Detailed Description of Invention]

[0001]

[Technical Field of the Invention]

The present invention relates to a claiming device for a medical flexible tube that clamps a medical flexible tube forming an extracorporeal circulation circuit such as a blood circuit, an auxiliary circuit, an infusion circuit, or the like to block a fluid flow at that portion.

[0002]

[Prior Art]

In general, a blood circuit in a dialysis device or the like is mainly formed by a flexible tube allowing patient's blood, a physiological saline solution, a drug to be administered, or the like to flow therein in medical sites, and connects components such as a dialyzer and a chamber, with each other. As shown in Fig. 4, conventionally, a clamping device for blocking this flexible tube at a desired portion mainly includes one end portion 102, the other end portion 104 in which an insertion hole 104a and a stopper 107 are formed, and a middle portion 106 in which an insertion hole 106a is formed.

[0003]

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.