

[54] LASER VASCULAR ANASTOMOSIS APPARATUS

[75] Inventors: Masane Suzuki; Hiroshi Shibamoto; Motonori Kanaya, all of Saitama, Japan

[73] Assignee: Fuji Photo Optical Co., Ltd., Omiya, Japan

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Primary Examiner—Lee S. Cohen
Attorney, Agent, or Firm—Young & Thompson

[57] ABSTRACT

A laser vascular anastomosis apparatus comprising a fiber probe with a conical tip formed at its distal end for transmitting therethrough an applying laser rays to butted vascular ends to be joined. The probe is inserted through the wall of one of vascular ducts to be anastomosed and then the conical tip is positioned inside the butt joint. The conical tip serves to reflect laser rays incident upon its wall once by total internal reflection and then to allow the reflected laser rays to emanate from the tip, passing through the opposite wall thereof so as to form annular sheath of laser rays which are applied to the annular inside wall of the butted portion of the vascular ducts to be anastomosed.

5 Claims, 3 Drawing Figures

