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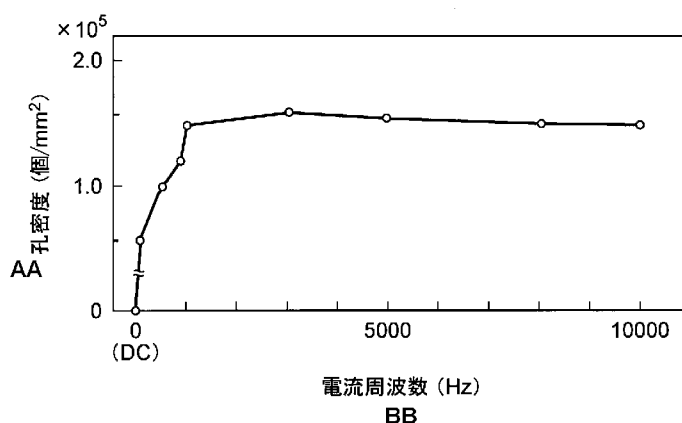
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(54) Title: MEDICAL PART AND MANUFACTURING METHOD THEREFOR

(54) 発明の名称: 医療用部品およびその製造方法

[図1]



AA - Hole density (quantity/mm²)
BB - Current frequency (Hz)

(57) Abstract: Provided is a medical part with excellent antibiotic properties and antibiotic substantivity as well as high biocompatibility, and a manufacturing method therefor. After an anodic oxidation treatment, wherein a pulsed current with a frequency of 50 to 10,000 Hz is applied for an electrolytic treatment, is applied to a base material in an acidic electrolytic bath or an alkaline electrolytic bath so as to form a film, which has minute holes and/or minute protrusions and recesses preferably in the quantity of $5 \times 10^4/\text{mm}^2$ or more on the surface of the base material, an iodine-impregnation treatment is applied so as to impregnate iodine or an iodine compound into said film. Polyvinyl pyrrolidone iodine, β -cyclodextrin iodine, or silver iodine is desirable for the iodine compound. Furthermore, a biocompatible metallic material selected from Ti, Ti alloy, stainless steel, and Co-Cr alloy is desirable for the base material. The film may be formed by means of a chemical treatment, a thermal treatment, or a machining process, or a combination of these, instead of the anodic

oxidation treatment. Thus, a medical part with excellent antibiotic properties and antibiotic substantivity as well as high biocompatibility can be manufactured easily and inexpensively.

(57) 要約:

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