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**Matsutani et al.**

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(54) **ROOT CANAL TREATMENT TOOL AND METHOD FOR MANUFACTURING THE SAME**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 120 days.

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(51) **Int. Cl.**  
**A61C 5/02** (2006.01)

(52) **U.S. Cl.** ..... **433/102**

(58) **Field of Classification Search** ..... **433/102,**  
**433/81, 224**

See application file for complete search history.

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*Primary Examiner*—John J. Wilson

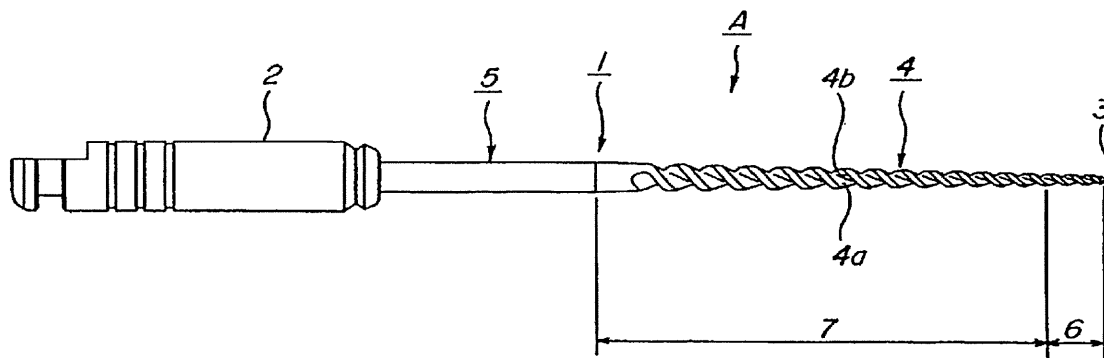
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(57) **ABSTRACT**

The present invention relates to a root canal treatment tool that is formed in a shape of a rod and has a work portion formed in a predetermined length from a tip and a shank formed in a manner continuous with the work portion. The work portion has a shape memory characteristic in a range of a predetermined length from the tip and a superelastic characteristic in a remaining portion.

**2 Claims, 4 Drawing Sheets**



**GOLD STANDARD EXHIBIT 2044**

FIG.1

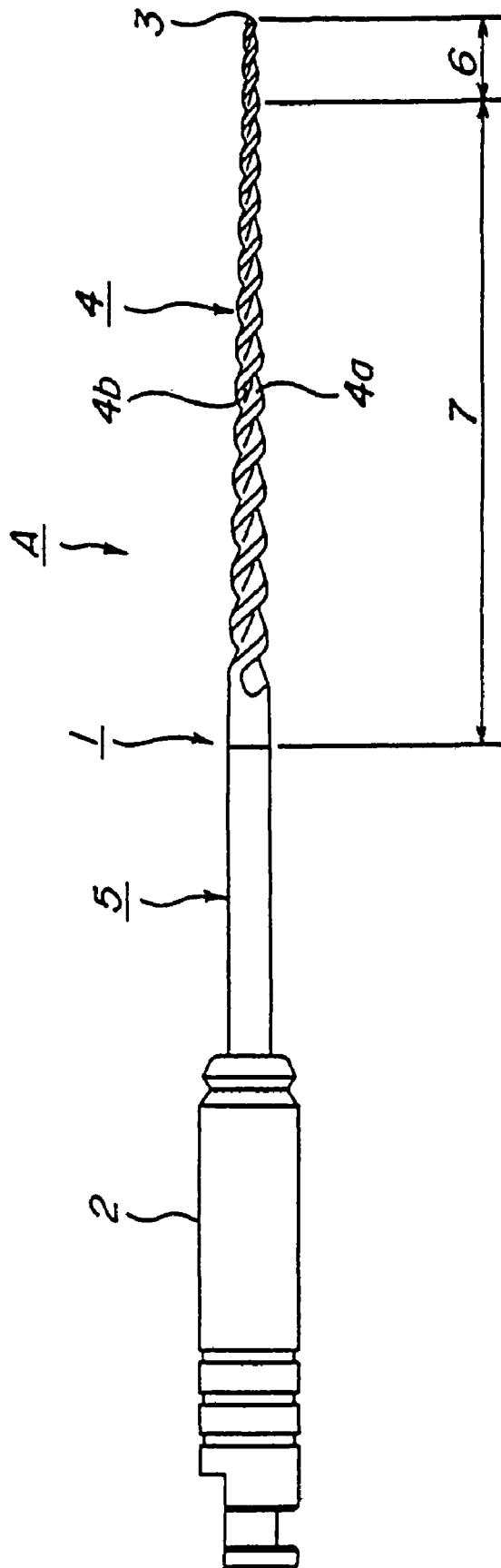
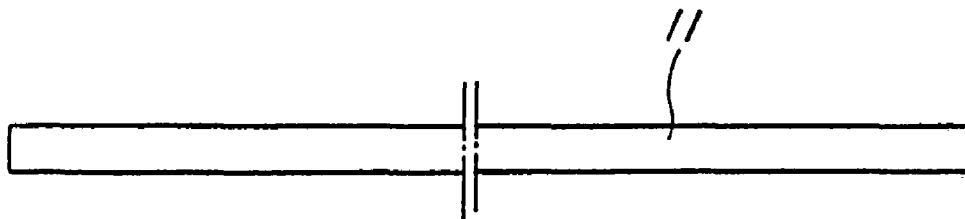
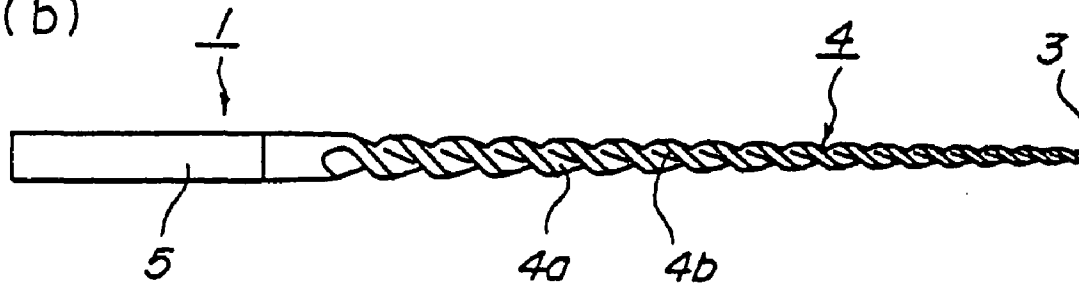


FIG. 2

(a)



(b)



(c)

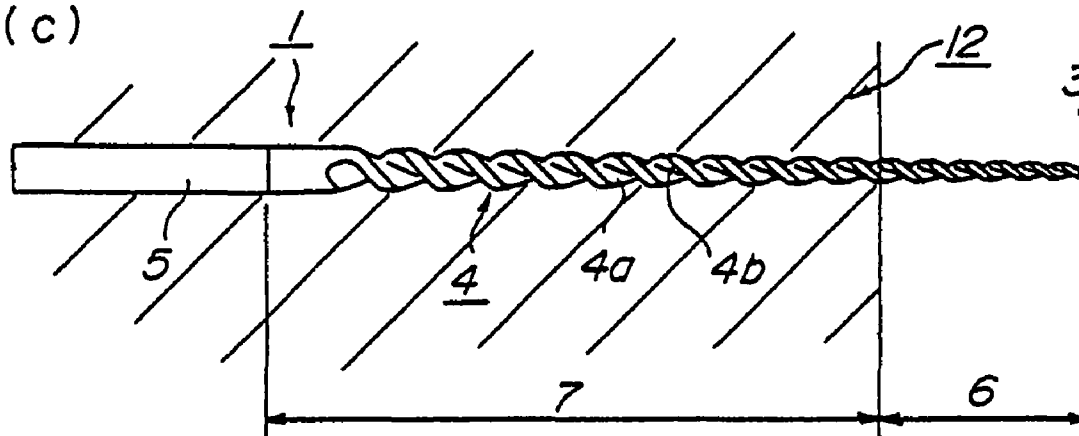


FIG. 3

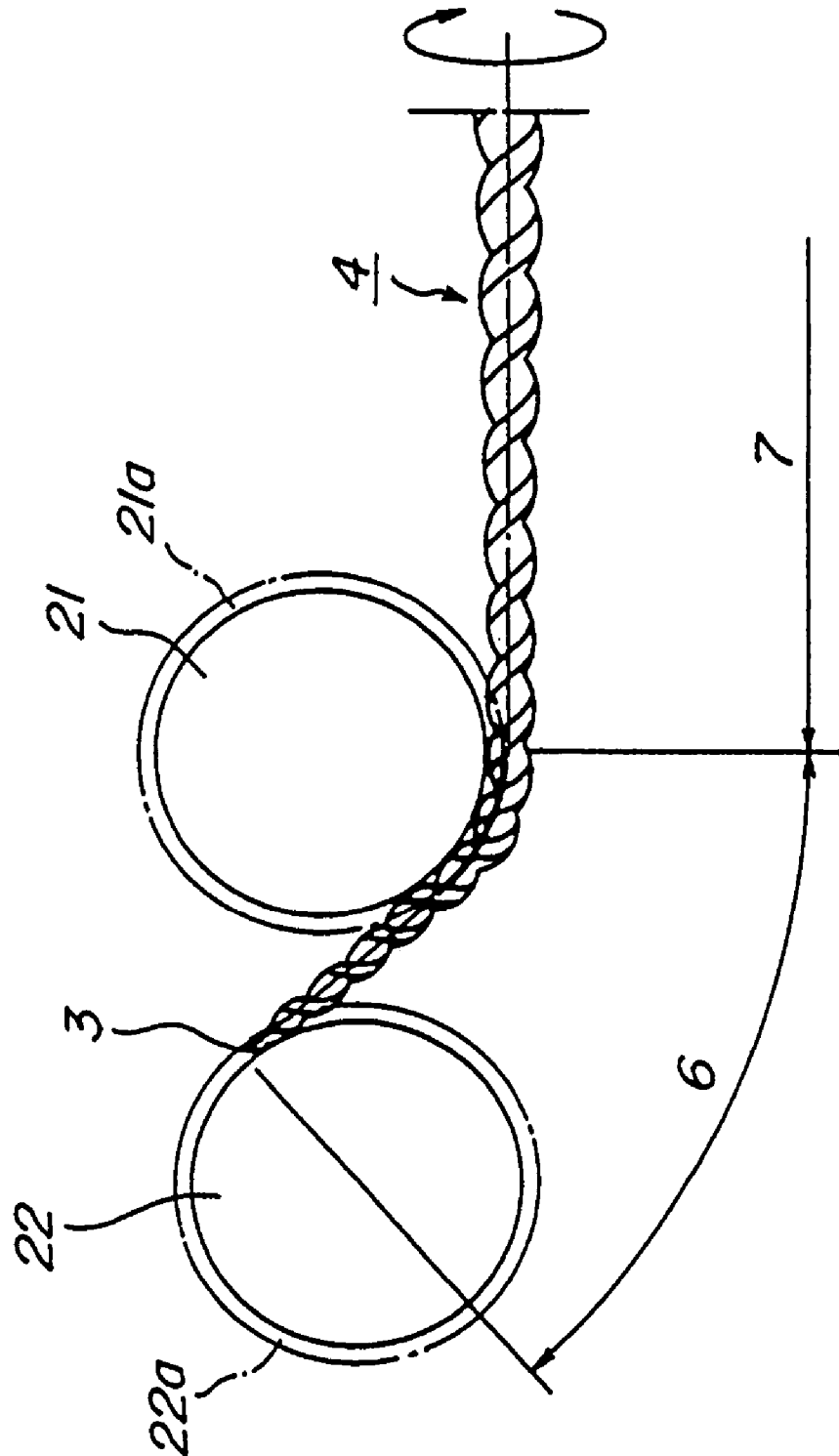
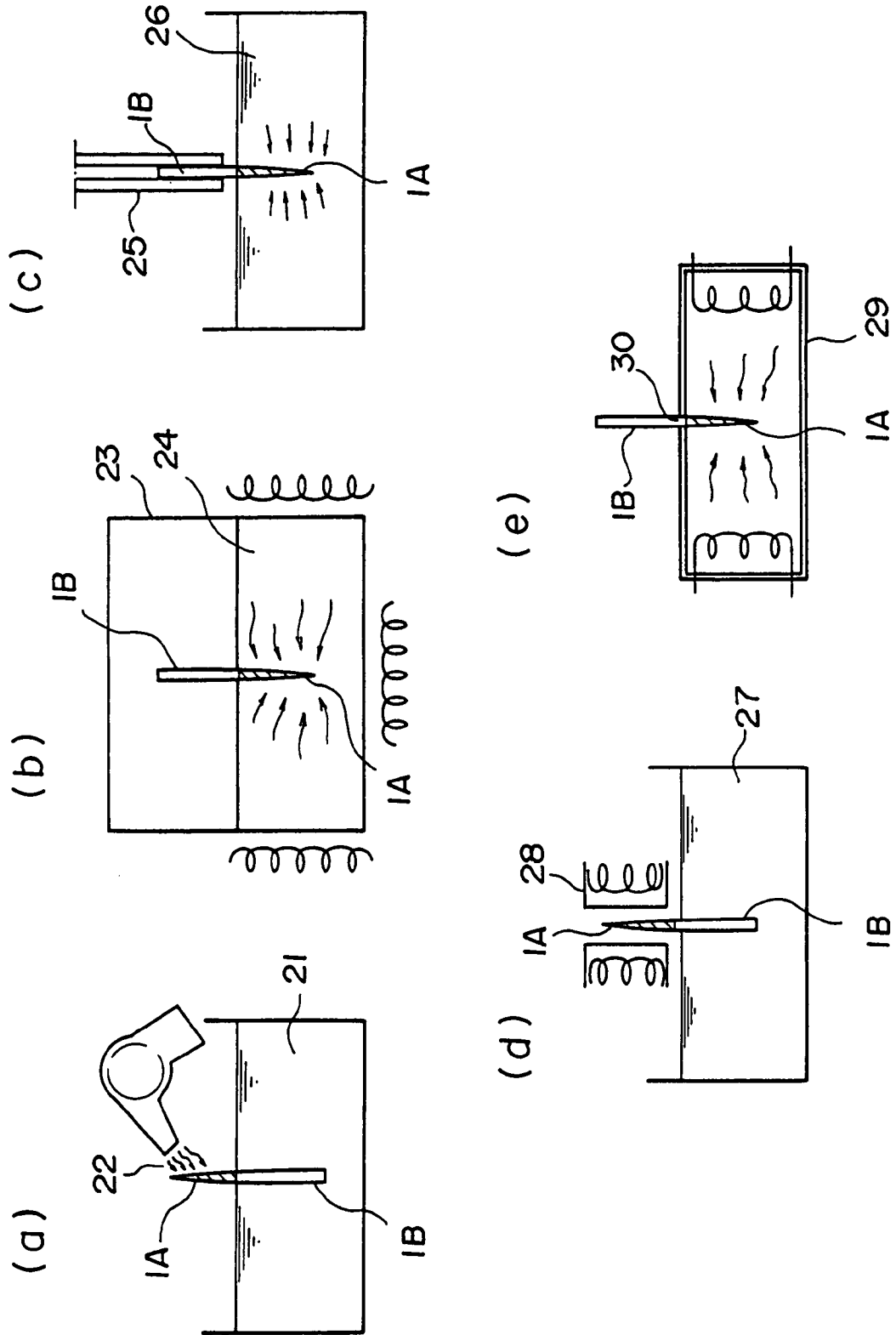


FIG. 4



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