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(54) **REGISTERING PHYSICAL AND VIRTUAL TOOTH STRUCTURES WITH MARKERS**

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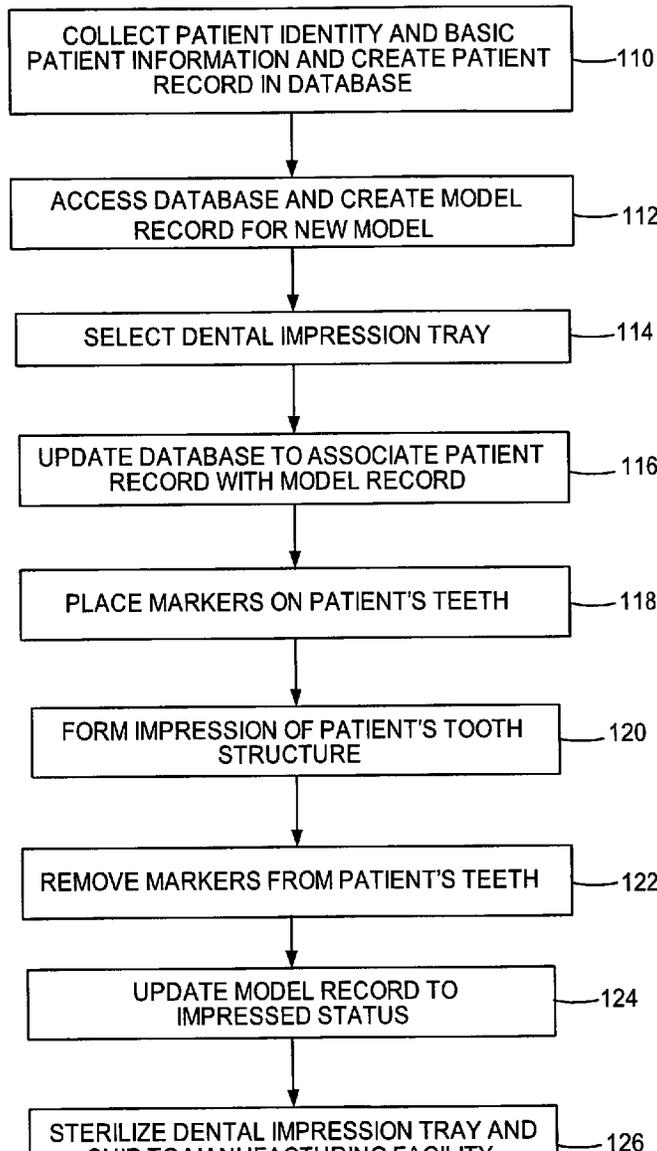
(57) **ABSTRACT**

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In general, the invention relates to techniques for registering a three-dimensional (3D) coordinate system of a physical model of a patient's tooth structure to a 3D coordinate system of a virtual model of the same tooth structure. Techniques are described to register the complex geometries of the physical and virtual tooth structures by using registration markers associated with the physical model.

(73) Assignee: **3M Innovative Properties Company**

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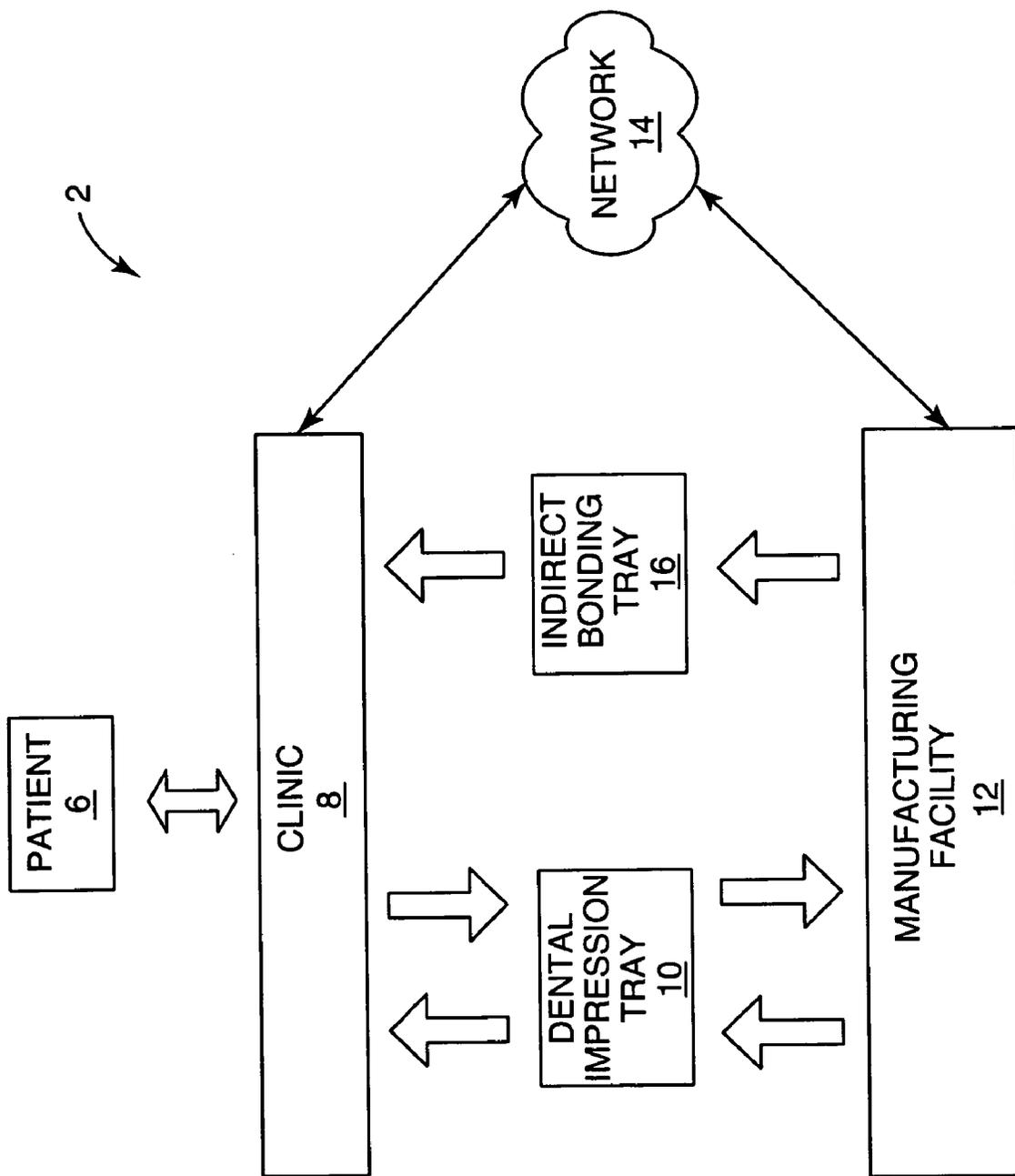


Fig. 1

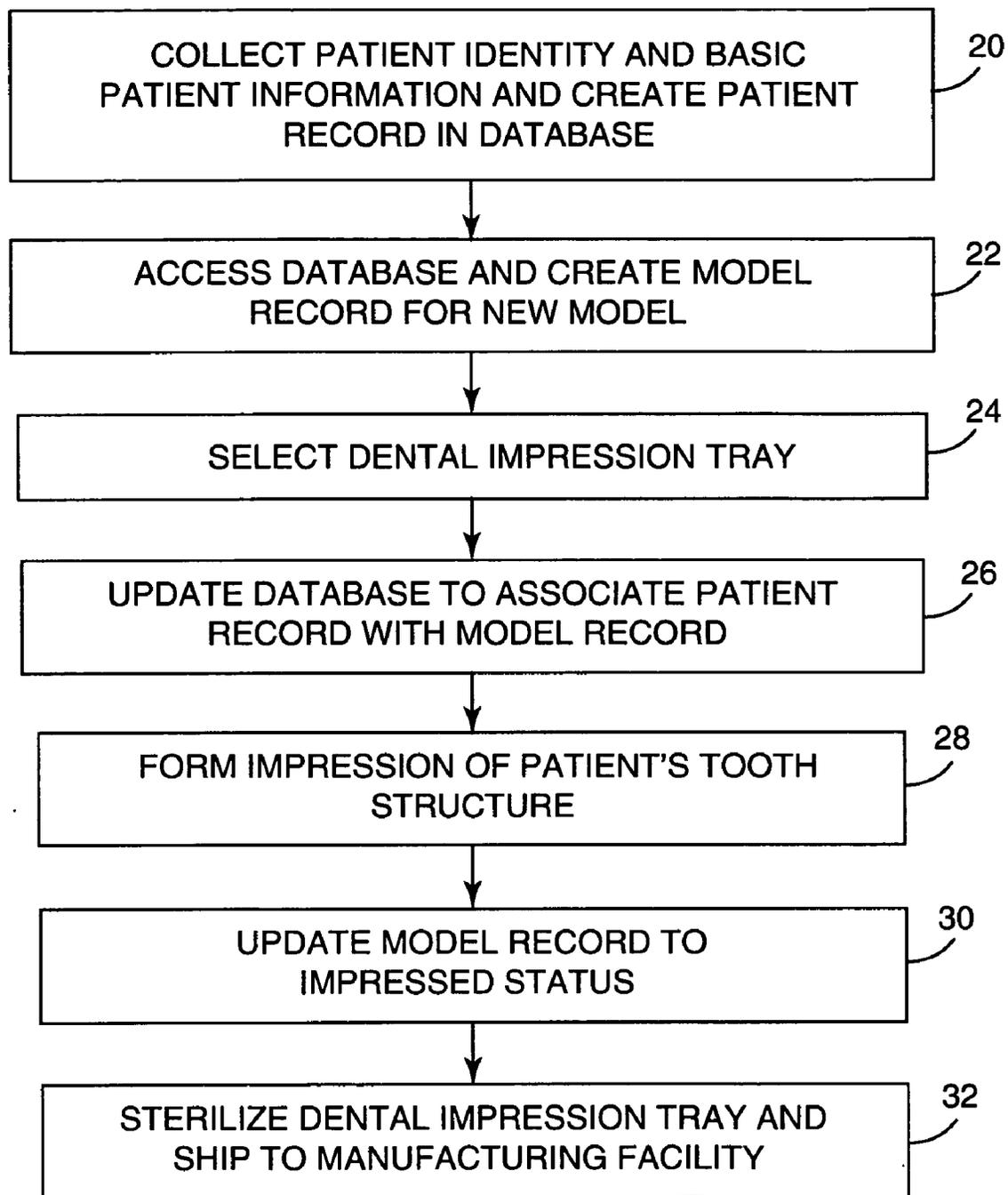


Fig. 2

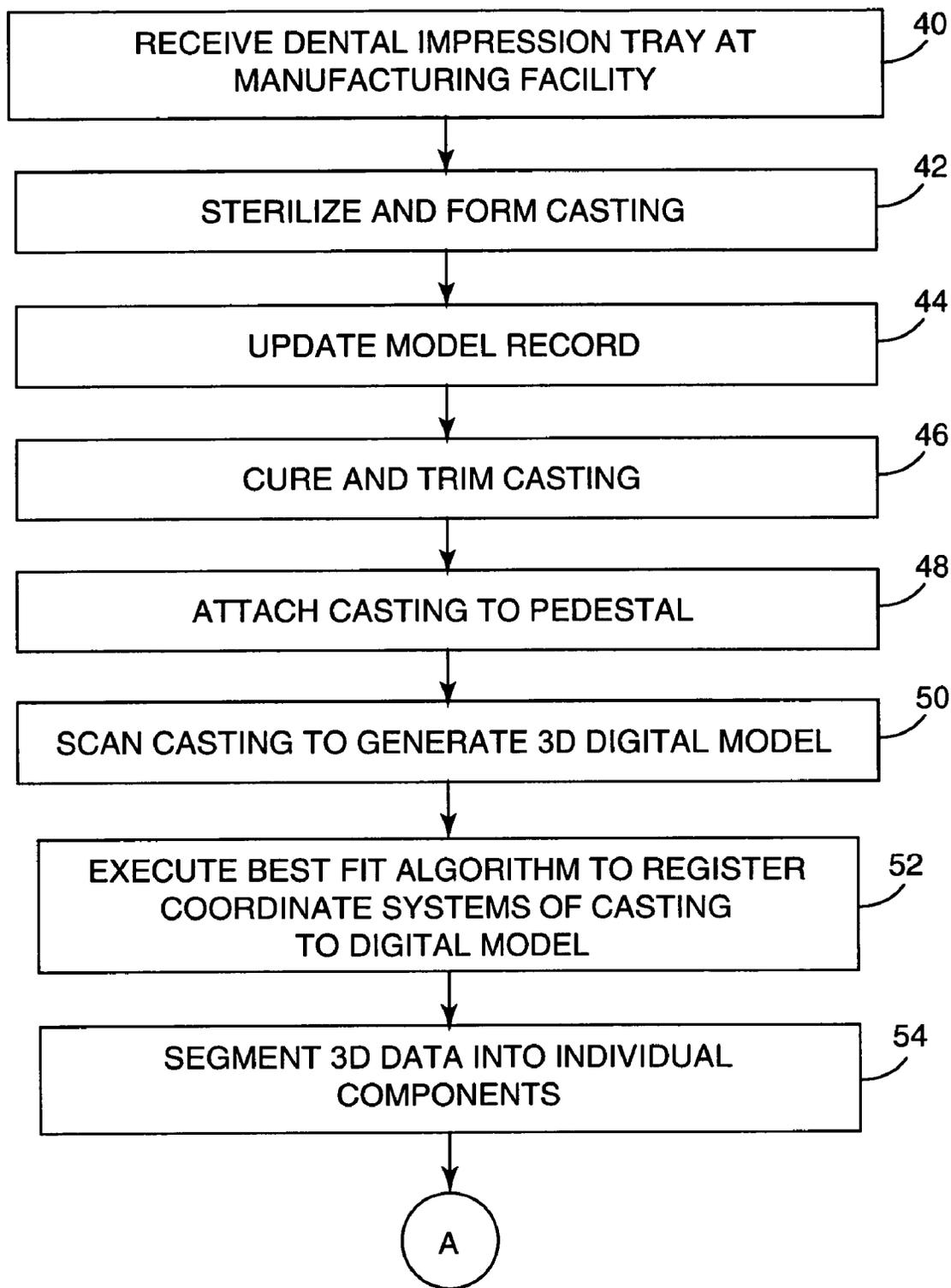


Fig. 3A

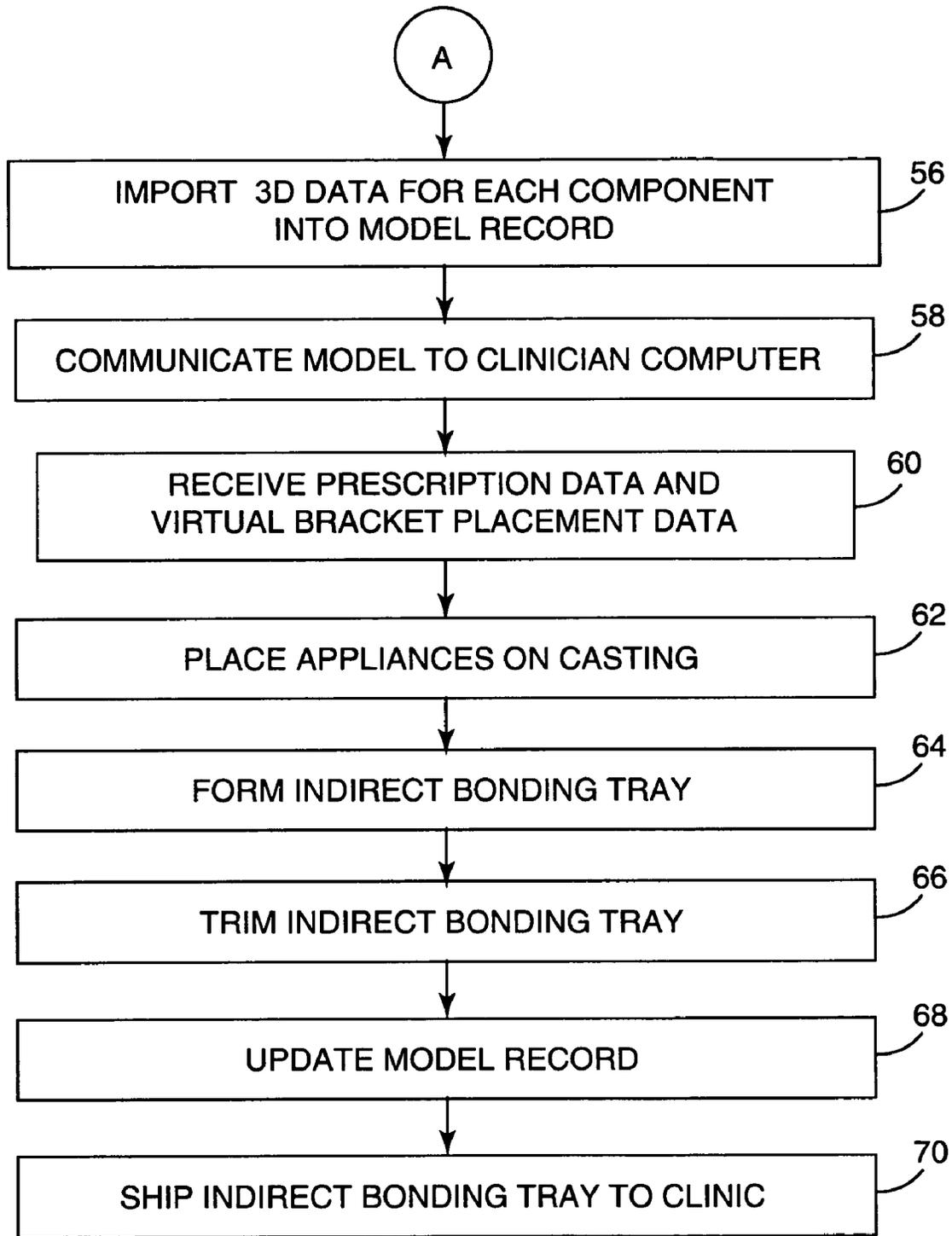


Fig. 3B

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