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(54) **INTERROGATION OF AN OBJECT FOR DIMENSIONAL AND TOPOGRAPHICAL INFORMATION**

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(58) **Field of Search** 342/22, 179; 367/8

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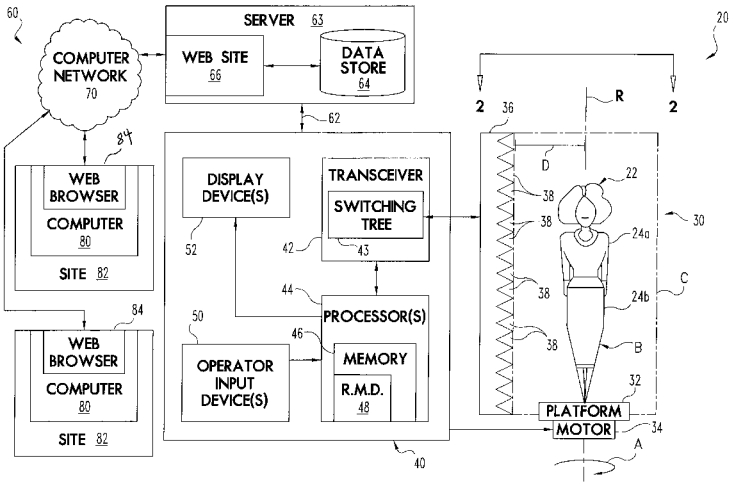
(57) **ABSTRACT**

Disclosed are systems, methods, devices, and apparatus to interrogate a clothed individual with electromagnetic radiation to determine one or more body measurements at least partially covered by the individual's clothing. The invention further includes techniques to interrogate an object with electromagnetic radiation in the millimeter and/or microwave range to provide a volumetric representation of the object. This representation can be used to display images and/or determine dimensional information concerning the object.

48 Claims, 9 Drawing Sheets