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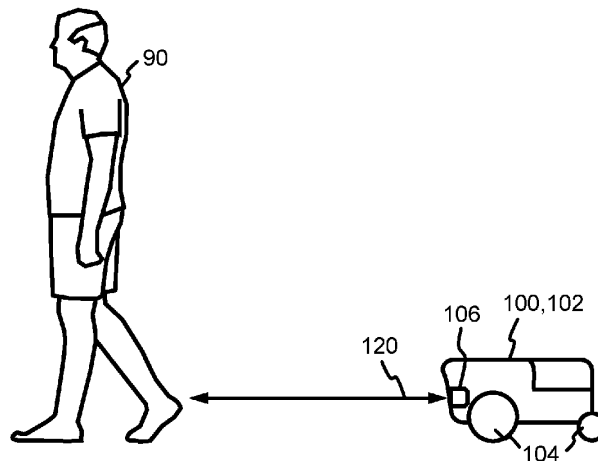


Fig. 8A

(57) Abstract: A marker-less gait monitoring method for use with a subject, comprising: acquiring a point cloud of data points based on a depth image of at least one of the subject's lower limbs; allocating selected ones of the data points to one of a foot model and a shank model; and determining one or more pose parameters of the foot model based on optimizing parameters of a foot-shank model, wherein the foot-shank model includes the foot model and the shank model as adjoining parts that are rotatable relative to one another about a common origin. In one embodiment, the depth image is a back view image of the subject.

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