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(54) **BIT STREAM STRUCTURE FOR
 COMPRESSED POINT CLOUD DATA**

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(57) **ABSTRACT**

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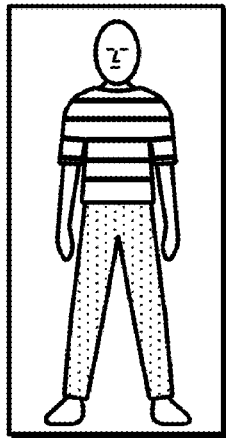
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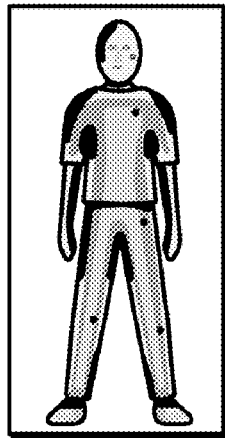
(63) Continuation of application No. 17/319,019, filed on
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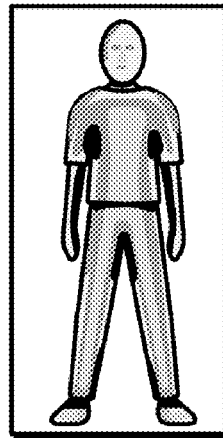
A system comprises an encoder configured to compress
 attribute information and/or spatial information for a point
 cloud and/or a decoder configured to decompress com-
 pressed attribute and/or spatial information for the point
 cloud. To compress the attribute and/or spatial information,
 the encoder is configured to convert a point cloud into an
 image based representation. Also, the decoder is configured
 to generate a decompressed point cloud based on an image
 based representation of a point cloud. In some embodiments,
 a bit stream structure may be used to communicate com-
 pressed point cloud data. The bit stream structure may
 include point cloud compression network abstraction layer
 (PCCNAL) units that enable use of groups of frames
 (GOFs), frame, and sub-frame signaling of patch informa-
 tion. Such a bit stream structure may permit low delay
 streaming and random access reconstruction of point clouds
 amongst other applications.



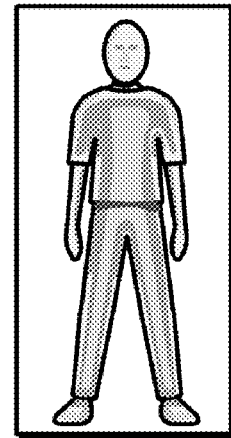
*Input Point
 Cloud*



*Initial
 Segmentation*



*Refined
 Segmentation*



*Final
 Patches*

