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(54) **METHODS AND DEVICES FOR TREE SWITCHING IN POINT CLOUD COMPRESSION**

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(57) **ABSTRACT**

Methods and devices for coding point cloud data using volume trees and predicted-point trees. In one embodiment of the disclosure, a method of encoding a point cloud data to generate a bitstream of compressed point cloud data representing a three-dimensional location of a physical object is provided, the point cloud data being located within a volumetric space. The method includes compressing a first part of the point cloud data represented by a first tree of a first type; determining for a given node of the first tree if an assignation to a second type of tree is enabled, said given node still being processed for the first tree; when the assignation is enabled, compressing a second part of the point cloud data represented by a second tree of the second type wherein, features associated with a root node of the second tree are at least partially obtained from the given node.