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(54) Title: METHOD AND SYSTEM FOR INDEXING AN N-DIMENSIONAL OBJECT

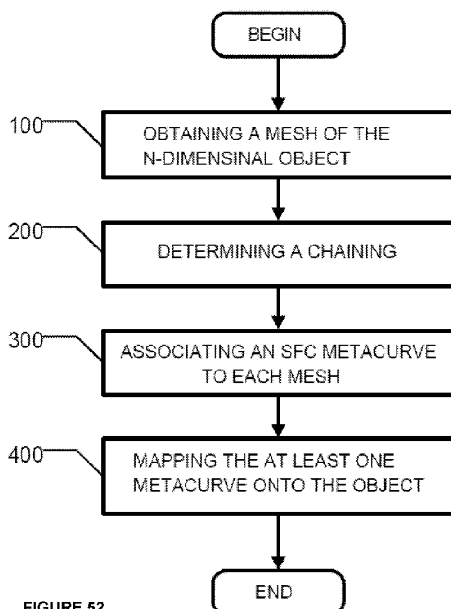


FIGURE 52

(57) Abstract: A method and system are disclosed for indexing an n-dimensional object comprising a plurality of points, the method comprising obtaining a mesh of the n-dimensional shape of the object, the mesh comprising at least one cell; determining a chaining traversing the at least one cell of the mesh; the chaining comprising for each cell a symbol traversing the cell and joining two vertices of the cell; for each cell: associating an SFC metacurve with each symbol associated with two vertices; and mapping the at least one SFC metacurve onto the object using a corresponding mapping function in order to associate with each point of the plurality of points a corresponding index of the at least one SFC metacurve.

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