

Abstract

A method for representing time dependent geometric shapes and geometric structures in computer systems is presented. More specifically, the invention presents a method for describing such objects and their movement through a data structure with ordered geometric objects. These objects are described as any combination of points, curves and surfaces that are anchored to each other in a graph structure. Various methods of anchoring can be used, giving the method a high degree of flexibility.

Animation is described as time dependency in the description of any part of the representation, including the definition of movement curves along which points move from an initial to a final position during a time interval.

If parts of the data structure are repeated in the model, they will normally be described only once. Additional occurrences will be described by using a reference to the first occurrence and a transformation.

Fig. 1



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