

IMPROVEMENTS IN METHODS AND APPARATUS FOR RECORDING AND
INFORMATION PROCESSING, AND RECORDING METHOD THEREFOR

ABSTRACT

A recording medium, recording and information processing apparatus and methods by which efficient processing of data and a high processing speed can be readily achieved at lower cost. A main CPU converts coordinates of a polygon in response to a manual operation of an operation unit by a user and transmits data of the polygon to a programmable packet engine via a main bus. The packet engine calculates a Z value representative of the position of the polygon in the depthwise direction from coordinate values of the apexes of the polygon supplied from the main CPU, divides the polygon into a number of sub-polygons corresponding to the Z value, converts coordinate values of the apexes of the sub-polygons in accordance with a normal vector and curved surface parameters and produces a curved surface composed of the sub-polygons. A graphical processing unit writes pixel data of the sub-polygons produced by the programmable packet engine into a frame buffer and performs rendering processing.

Figures 6 & 7