

(19) World Intellectual Property Organization
International Bureau



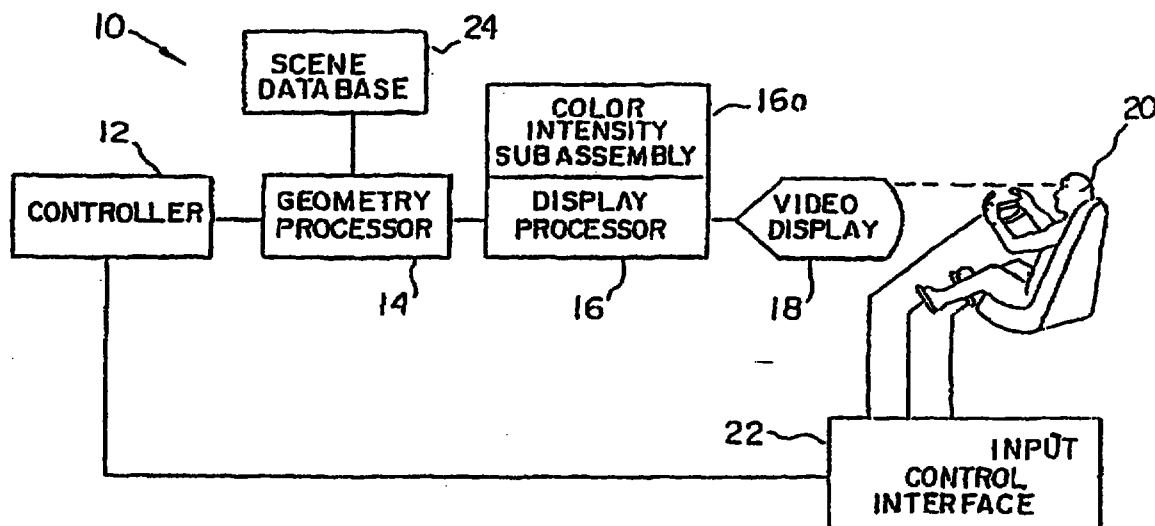
(43) International Publication Date
25 January 2001 (25.01.2001)

PCT

(10) International Publication Number
WO 01/06460 A1

- (51) International Patent Classification⁷: G06T 11/40 (74) Agents: GROLZ, Edward, W. et al.; Scully, Scott, Murphy & Presser, 400 Garden City Plaza, Garden City, NY 11530 (US).
- (21) International Application Number: PCT/US00/19523
- (22) International Filing Date: 17 July 2000 (17.07.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
09/354,189 15 July 1999 (15.07.1999) US
- (71) Applicant: REAL 3D, INC. [US/US]; 2603 Discovery Drive, Orlando, FL 32826 (US).
- (72) Inventor: STEINER, Walter, R.; 1790 Turtle Hill Road, Enterprise, FL 32725 (US).
- (81) Designated States (*national*): CA, CN, JP, KR, SG.
- (84) Designated States (*regional*): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).
- Published:
— With international search report.
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: IMPROVED S-BUFFER ANTI-ALIASING METHOD



(57) Abstract: A method and apparatus, for use in a computer image generation system (10) wherein polygons are displayed on a video display (18), for encoding data representing intersections of the polygons and the pixels. The method comprises the steps of receiving input data signals characterizing a set of coordinates of each of at least three vertices of each polygon to be displayed through an input control interface (22), each different pair of the vertices of each polygon defining a different edge of the polygon; and generating, through a geometry processor (14), responsive to the received vertex data signals, edge data signals describing the intersection, if any, of the polygon edges with each pixel to be displayed.

WO 01/06460 A1