



US006028590A

United States Patent [19]

[11] Patent Number: 6,028,590

Wood et al.

[45] Date of Patent: Feb. 22, 2000

[54] COLOR CONVERSION FOR PROCESSORS

5,790,110 8/1998 Baker et al. 345/202

[75] Inventors: Stephen V. Wood, Hillsboro; Larry E. Wickstrom, Portland, both of Oreg.

5,798,767 8/1998 Poole et al. 345/431

5,821,918 10/1998 Reinert et al. 345/154

5,850,208 12/1998 Poole et al. 345/153

5,864,345 1/1999 Wickstrom et al. 345/431

[73] Assignee: Intel Corporation, Santa Clara, Calif.

Primary Examiner—Matthew Luu

Assistant Examiner—Jeff Piziali

[21] Appl. No.: 09/137,890

Attorney, Agent, or Firm—Blakely, Sokoloff, Taylor & Zafman LLP

[22] Filed: Aug. 20, 1998

[57] ABSTRACT

[51] Int. Cl.⁷ G09G 5/02

[52] U.S. Cl. 345/154

[58] Field of Search 345/153-154, 345/199, 202, 431; 395/131; 364/526

A method for color conversion is disclosed. The method includes the steps of generating constants from a number of points, spacing and an endpoint for YUV point spacing, adding a constant to a value representing image data to clamp the value towards a predetermined maximum range of image points, subtracting a second constant from the resulting sum value to clamp the sum value towards a predetermined minimum range representing points in an image graph, shifting the resulting difference using spacing information to generate a value for Y,U,V values, and combining the resultant Y,U,V values to generate palette indexes to represent given image data.

[56] References Cited

U.S. PATENT DOCUMENTS

H1506	12/1995	Beretta	345/199
5,233,684	8/1993	Ulichney	395/131
5,455,600	10/1995	Friedman et al.	345/153
5,572,236	11/1996	Feig et al.	345/154
5,668,890	9/1997	Winkelman	382/167
5,731,988	3/1998	Zandi et al.	364/526
5,784,050	7/1998	Corry	345/154

27 Claims, 7 Drawing Sheets

