



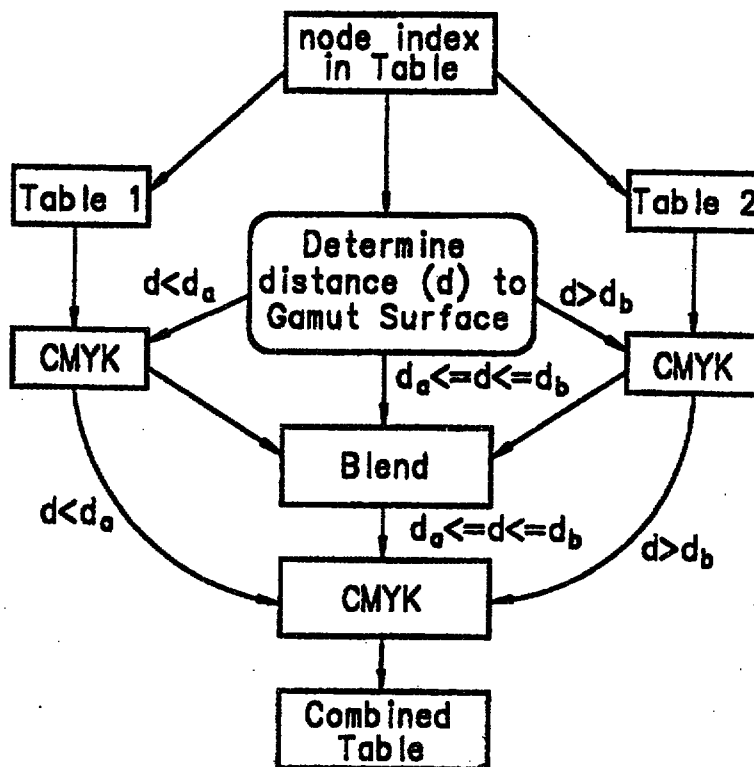
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(54) Title: GAMUT CORRECTION WITH COLOR SEPARATION AND METHODS AND APPARATUSES FOR PERFORMING SAME

(57) Abstract

Methods and apparatuses for correcting gamut limitations of a color device. A method includes creating a predefined color space for use in gamut correction due to the gamut limitations of the color device, such as a color printer, and producing a set of color data values using the predefined color space. The set of color data values is for use in converting from a first color space (e.g., RGB) to a second color space (e.g., CMYK). A method in another embodiment includes creating a first color separation table, creating a predefined color space, creating a second color separation table for converting values of colors in the predefined color space to values in a colorant space, and creating a composite color separation lookup table by using a plurality of first values from the first color separation table and using a plurality of second values from the second color separation table. The predefined color space is typically based upon a set of re-defined chromaticities which are used in a transformation function. Various apparatuses of the invention, including data structures in computer readable media (e.g., LUTs) and hardware and/or software combinations, are described. Methods of using these apparatuses are also described.



Combining separation tables.