ABSTRACT

An image processing apparatus (30) is described in which the number of operations necessary for color correction processing is made smaller than the number of operations necessary for gradation number conversion processing in a later process without causing deterioration of image quality, so that color correction processing and gradation number conversion processing can be conducted at high speed. The number of gradations capable of being converted in the pre-gradation number conversion section (40) is larger than that in the post-gradation number conversion section (46). The pre-gradation number conversion section (40) conducts pre-gradation number conversion for converting the gradation number of color components of R, G, B of the original color image data into the gradation coordinate value of the most appropriate grid point in the color space. The color compensating section (42) reads out the gradation compensating data corresponding to the color image data subjected to the pregradation number conversion from the color compensating table memory (34), so that the gradation number of each color component of Rk, Gk, βk is compensated and outputted. The post-gradation number conversion section (46) conducts post-gradation number conversion on the data obtained from the color compensating section so that a finally desired gradation number can be obtained.

This Sheet Has Been Replaced