

ABSTRACT

Recording data is produced from first image data corresponding to each pixel with a first number of gradations so as to supplied to a recording apparatus, which expresses each pixel with a number of gradations smaller than the first number of gradations. Second image data is produced by converting the first image data into a color space that can be output by the recording apparatus. Third image data is produced based on a second number of gradations of the second image data so that the third image data has a third number of gradations. The recording data is produced by applying a halftone process to the third image data. The third number of gradations of the third image data is adjusted to be equal to or larger than the second number of gradations of the second image data in accordance with a number of colors for each pixel used in the second image data.