

Title (en)

Color image forming method and apparatus, and microcapsule toner for use therewith

Title (de)

Methode und Vorrichtung zur Farbbildformung mittels eines Mikrokapselfoners

Title (fr)

Methode et appareil de formation d'image en couleur utilisant un toner en forme de microcapsules

Publication

EP 1380902 B1 20080220 (EN)

Application

EP 03015821 A 20030710

Priority

JP 2002201855 A 20020710

Abstract (en)

[origin: EP1380902A1] A color image forming method and apparatus using larger microcapsules (40) each of which contains a plurality of kinds of smaller microcapsules (41M, 41C, 41Y, 41K) scattered within the larger microcapsule (40), reacting substances (44, 45) that are mixed with each other to perform a coloring reaction being scattered inside and outside the smaller microcapsule (41M, 41C, 41Y, 41K). A protective wall (43) of each smaller microcapsule (41M, 41C, 41Y, 41K) is broken with a corresponding predetermined ultrasonic stimulus depending upon color component information to thereby cause the reacting substances (44, 45) to diffuse with each other to perform a coloring reaction and hence image printing. The conditions for breaking the protective walls (43) of the respective smaller microcapsules (41M, 41C, 41Y, 41K) that contain a color former component (44) vary from smaller microcapsule to smaller microcapsule, or are determined depending upon the outer shapes, materials and thickness of the protective walls (43) of the smaller microcapsules. <IMAGE>

IPC 8 full level

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