



TONER FOR DEVELOPING ELECTROSTATIC IMAGE

ABSTRACT OF THE DISCLOSURE

A toner for developing an electrostatic image is constituted by a binder resin and a colorant. The toner is characterized by a percentage change G' of at most 50 % as calculated by the following formula (1):

$$\gamma_{G'} = (1 - G'_{50\%}/G'_{1\%}) \times 100 \quad \dots(1),$$

wherein $\gamma_{G'}$ denotes a percentage change of storage modulus, $G'_{50\%}$ denotes a storage modulus at 50 % strain at 150 °C, and $G'_{1\%}$ denotes a storage modulus at 1 % strain at 150 °C; a percentage change $\gamma_{G''}$ of at most 50 % as calculated by the following formula (2):

$$\gamma_{G''} = (1 - G''_{50\%}/G''_{1\%}) \times 100 \quad \dots(2),$$

wherein $\gamma_{G''}$ denotes a percentage change of loss modulus, $G''_{50\%}$ denotes a loss modulus at 50 % strain, and $G''_{1\%}$ denotes a loss modulus at 1 % strain; and a storage modulus G' of $3 \times 10^3 - 7 \times 10^4$ dyn/cm² in a range of 1 - 50 % strain at 150 °C. The toner is characterized by applicability to a wide variety of image forming apparatus, especially those having remarkably different fixing speeds.

FIGURE 1