Effect of CCA Particle Configuration on the Charging Behavior of CCA/Binder Matrix Film Surface

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Abstract

The amount of tribo-charging generated between CCA/binder matrix films and ferrite carrier beads were measured by the cascade method. CCA particles were dispersed or dissolved in several binder solutions, and these solutions were applied to stainless steel plates to prepare the CCA/binder matrix films. The results show that the amount of charge is determined by the size or orientation of the CCA particles on the matrix film surfaces and by the chemical interactions between the binder-resin molecules and the CCA particles. It was confirmed that the charging characteristics of the CCA/binder matrix can be evaluated quantitatively by the cascade measurement.

Biography

Keiki Suganami obtained his B.S. in chemistry from Sophia University in 1982. Since that year, he worked on research and development division at Morimura-Badische Co., Ltd. 1999, the company name was changed to Morimura-Chemicals Ltd. In this year, he entered a Ph D. course of Ibaraki University.

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