

Title (en)
Recycle developing process

Title (de)
Recycling-Entwicklungsverfahren

Title (fr)
Procédé de développement utilisant des développeurs recyclés

Publication
EP 0699976 A1 19960306 (EN)

Application
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Abstract (en)
The present invention relates to a recycle developing process which comprises developing an electrostatic image formed on a photosensitive material with a starting developer filled in a developing vessel, transferring the toner image to a predetermined paper, recovering the toner remaining on the photosensitive material by a cleaning means, and repeating the developing procedure while replenishing a virgin toner and the toner recovered by the cleaning means into the developing vessel; wherein the virgin toner to be replenished into the developing vessel is that which is fulfilled in a container wherein a rotating roller is provided in an opening portion at a lower portion has a flowability, shown as a fallen amount of the toner at a time of falling via the rotating roller for a certain fixed time, of 50 to 70 % based on the toner in the starting developer. According to this process, an abrupt decrease in the properties of the developer due to the mixing of the recovered toner can be relaxed. As a result, a stable image free from fogging or toner scattering can be formed by the recycle developing process. <MATH>

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CPC (source: EP KR)
G03G 21/00 (2013.01 - KR); **G03G 21/10** (2013.01 - EP)

Citation (search report)
• [A] EP 0282223 A1 19880914 - MITA INDUSTRIAL CO LTD [JP]
• [A] US 5234786 A 19930810 - UEDA MASATO [JP], et al
• [A] US 5307128 A 19940426 - MURASAKI HIROSHI [JP], et al
• [A] EP 0431930 A2 19910612 - SHARP KK [JP]
• [A] EP 0488789 A1 19920603 - MITA INDUSTRIAL CO LTD [JP]

Cited by
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