

Title (en)

Toner mixing in magnetic brush development apparatus

Title (de)

Tonermischer für Magnetbürstentwicklungsgerät

Title (fr)

Mélangeur de toner pour appareil de développement à brosse magnétique

Publication

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Application

EP 94113291 A 19901126

Priority

- EP 91900454 A 19901126
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- US 44425689 A 19891201
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Abstract (en)

[origin: WO9108523A1] A development apparatus (10) includes a housing (14) having a portion defining a sump (S) adapted to contain a supply of developer material, and a magnetic brush (36) located substantially within the housing (14) in spaced relation to the sump portion (S) for applying developer material to the latent image. A feed mechanism (60) including a metering assembly (50) located within the housing (14) between the sump portion (S) and the magnetic brush (36) transports developer material from the sump (S) to the magnetic brush (36) and a mechanism (26) located in the sump portion (S) agitates developer material and transports developer material to the feed mechanism (60). A take-off skive (74) for stripping development material from the magnetic brush (36) after application to a latent image and directing such material to the sump portion (S) is mounted so that the skive (74) is self-adjustably supported between the metering assembly (50) and the magnetic brush (36). Further, developer material in the sump portion (S) is replenished by a device (70) which includes a reservoir (72) for replenishment material adjacent to the pump portion (S) a flow communication path (18a) between the reservoir (72) and the sump portion (S) and a selectively rotatable roller (90) located relative to the path to control flow of replenishment material through the path. The entrance to the path is configured to engage the roller (90) such that the set up latitude between the roller and path is increased. Measuring the level of replenishment material in the reservoir is facilitated by the material monitor (94) located in the bottom of the reservoir (72) immediately upstream of the flow communication path, the surface of the monitor (94) being periodically swept to assure accurate measurement of replenishment material level. Still further, a shield (44) is located upstream of the development zone between the housing and the image carrying member (12) for containing developer material within the development zone to substantially prevent escape of airborne particulate material from the apparatus (10).

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