

- [54] **ELECTROGRAPHIC MAGNETIC BRUSH DEVELOPMENT APPARATUS AND SYSTEM**
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[57] **ABSTRACT**

A magnetic brush applicator for use in an electrographic reproduction apparatus for applying a magnetic developer to a recording element comprises a cylindrical non-magnetic sleeve having a rotatably driven magnetic core piece positioned therein. According to the invention, the axis of rotation of the magnetic core piece is displaced from the sleeve axis, such displacement being toward a development zone at which the applicator applies developer to the recording element. In a preferred embodiment, the rotational axis of the core piece lies in a plane passing through the sleeve axis, such plane being angularly displaced with respect to a second plane connecting the sleeve axis and the line of closest contact between the sleeve and recording element. Such angular displacement is between 0° and 20° in a direction upstream of the second plane as determined by the direction of core piece rotation. As a result of the non-concentric arrangement between the applicator's sleeve and core piece, the torque requirements for rotating the core piece are reduced, developer replenishment is facilitated and less thermal energy is introduced into the developer during rotation of the core piece.

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9 Claims, 4 Drawing Figures

