

Title (en)  
DISCRETE FLUX-DIRECTED MAGNET ASSEMBLIES AND SYSTEMS FORMED THEREWITH

Title (de)  
DISKRETE FLUSSGERICHTETE MAGNETANORDNUNGEN UND DAMIT GEFORMTE SYSTEME

Title (fr)  
ENSEMBLES AIMANTS ORIENTÉS FLUX DISCRETS ET SYSTÈMES FORMÉS AVEC CEUX-CI

Publication  
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Application  
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Abstract (en)  
[origin: WO2022204329A1] Magnetic arrays and related systems. An example array for a machine contains a plurality of discrete magnetic segments. When the segments are spaced away from influence of ferromagnetic material, such as prior to placement in the array, each includes a pole having the same maximum field strength. When the segments are (i) formed in a sequence along a circumferential array with rotated fields along the array, and (ii) with each positioned in sufficient proximity to the next segment in the sequence for the fields to interact with one another, flux channeling can be effected similar to that observed with a Halbach array. In different embodiments of the invention, for flux channeling to occur the segments may be in physical contact with one another or spaced-apart while in sufficiently close proximity that the fields between segments next to one another in the array interact to effect flux channeling.

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