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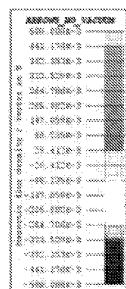


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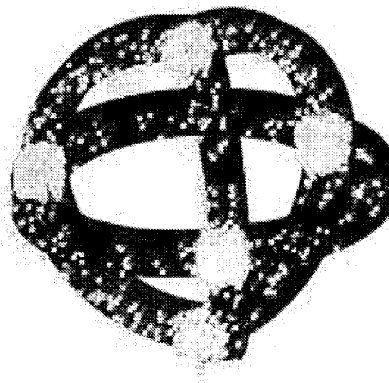
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(54) Title: MULTI-PHASE ELECTRICAL TRANSFORMER AND POWER CONTROL APPARATUS

Figure 16



SPHERE_SCE_3_ARROW: TIME = 0.0



(57) Abstract: An electrical power control apparatus, including: a magnetic core having a plurality of phase limbs for respective phases of electric power, each of the phase limbs being interconnected to the other phase limbs at respective ends of the limb; primary windings around the respective phase limbs to receive input electrical energy in the form of input signals for the respective electrical phases and generate corresponding magnetic fluxes in the phase limbs; secondary windings around the respective phase limbs to generate output electrical energy in the form of output signals for respective electrical phases from magnetic fluxes in the phase limbs; and control windings around respective portions of the magnetic core to receive control signals for respective electrical phases to modify the magnetic fluxes in the respective phase limbs in order to modify the output signals generated from the secondary windings so that the output signals have one or more electrical attributes that satisfy respective predetermined criteria.

[Continued on next page]

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