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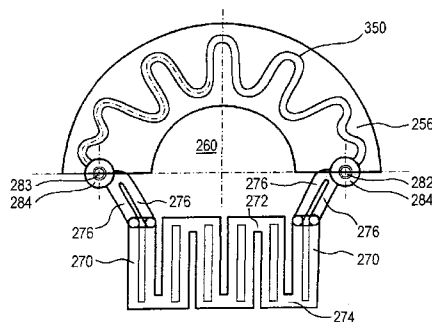
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR COOLING MAGNETIC CIRCUIT ELEMENTS



(57) Abstract: An apparatus and method for providing cooling to a magnetic circuit element having a magnetic core disposed around a centrally located core support member (200) having at least one core support member wall (210) is disclosed which may comprise a core support coolant inlet (282); a core support coolant outlet (283); a plurality of interconnected coolant flow passages (270) contained within the core support member wall and inter connected an arranged to pass coolant from one coolant flow passage to the next within the core support member wall along a coolant flow path within at least a substantial portion of the core support member wall from the core support coolant inlet to the core support coolant outlet. The apparatus may also comprise each core support coolant flow passage is in fluid communication with a fluid communication plenum at each end of each respective core support coolant flow passage, with each respective fluid communication plenum forming an outlet plenum for at least a first one of the respective core support coolant flow passages and an inlet plenum for at least a second one of the respective core support coolant flow passages along the coolant flow path from the core support coolant inlet to the core support coolant outlet.



WO 2005/001853 A3



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