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(54) Title: **HIGHLY SENSITIVE SPIN VALVE HEADS USING A SELF-ALIGNED DEMAG-FIELD BALANCE ELEMENT**

(57) Abstract

A magnetic read head (30) for use in a magnetic data storage and retrieval system has a first current contact (40), a second current contact (42), a magnetoresistive read sensor (34), and a demagnetization field balance element (50). Positioned between the first and second current contacts (40, 42) are both the magnetoresistive read sensor (34) and the demagnetization field balance element (50). The demagnetization field balance element (50) is both electrically isolated from and magnetically coupled to the magnetoresistive read sensor (34).

