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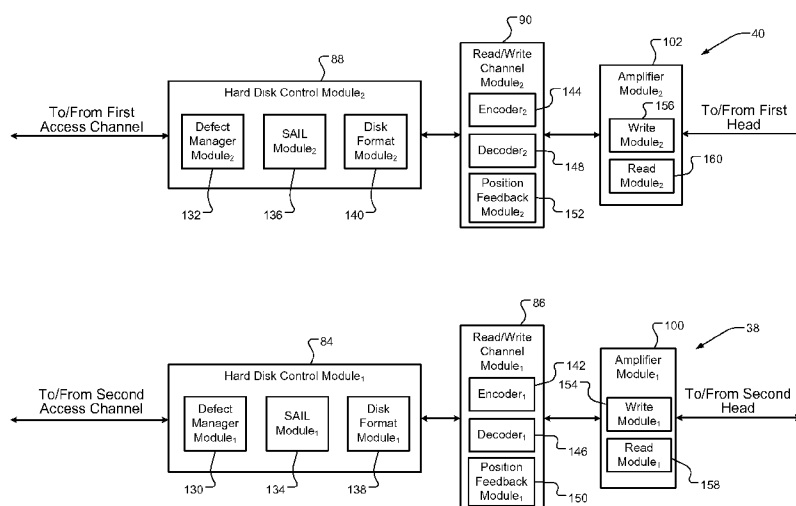


FIG. 2

(57) Abstract: A hard disk drive system includes a first channel module and a second channel module. The first channel module is configured to receive a first data from or transfer the first data to a first amplifier module of a hard disk assembly when reading from or writing to a first surface of a disk of the hard disk assembly. The second channel module is configured to receive a second data from or transfer the second data to a second amplifier module of the hard disk assembly when reading or writing to a second surface of the disk while the first channel module receives the first data from or transfers the first data to the first amplifier module.