

Abstract

A Bi-directional Current Switching Circuit for a Load

5 A bi-directional current switching circuit (9) can be used as a
write driver for driving an inductive head (5) in a magnetic storage
system. It consists of an H-bridge configuration having a top pair of
switchable current source circuits (2, 3) and a bottom pair of
switchable current source circuits (50, 51). The top pair of current
10 source circuits (2, 3) are switched by a differential input signal such
that one is OFF while the other is ON. Similarly, the bottom pair of
current source circuits (50, 51) are switched by a differential input
signal such that one is OFF while the other is ON. The top and
bottom current source circuits are controlled such that the two
15 circuits that are ON at the same time are diagonally opposite each
other, thereby providing a current path through the inductive head
(5).

FIG. 3