

BURIED MAGNETIC TUNNEL-JUNCTION MEMORY CELL AND METHODS

ABSTRACT

5 A magnetic memory cell (20) made on a substrate (50) has a first metal
conductor (40), a first magnetic layer (80) disposed on the first metal conductor,
a planar interlayer dielectric (ILD) (35) having a via opening (65) extending
through it to the first magnetic layer (80), a buried tunnel junction (75) over the
first magnetic layer within the via opening, a second magnetic layer (60) filling
10 the via opening and burying the tunnel junction, and a second metal conductor
(30) coupled to the second magnetic layer. Methods for using the memory cell
in memories (10) and other devices and methods specially adapted for
fabrication of the memory cell are disclosed.

(Fig. 1)