ball is seated in the seat when a pressure differential is applied across the seat from above. For example, as fluids are pumped from the surface downhole, the ball is seated in the seat by the fluid flow and the pressure differential across the seated ball maintains it in the seat; thus, closing off the axial bore in the mandrel. In other words, the seated ball may prevent fluid above the ball from flowing to portions of the wellbore below the ball.

[0005] In many instances, a caged ball is utilized to run the ball down hole within the downhole tool and enable plugging when desired by developing fluid pressure behind the ball so as to seal it against the seat. In some cases, it is desirable to allow fluid to be pumped from the surface downhole below the ball. In the past, downhole tools have relied on the use of springs to hold the ball off seat or utilized bypass through restricted ports to circumvent the ball once it was seated.

[0006] It is of interest in drilling and completion operations to have alternative means of achieving bypass flow, which do not rely on springs or bypass ports.

SUMMARY OF THE INVENTION

[0006a] According to one aspect, there is provided a check valve comprising:

a magnetic plug; a magnetic seat, wherein said magnetic plug and magnetic seat operationally engage so as to have a magnetic resistivity such that said magnetic plug has a first position in which it is not sealingly engaged with said magnetic seat and second position where said magnetic plug is sealingly engaged with said magnetic seat.

[0006b] According to another aspect, there is provided a method of using a downhole tool of the type that has a mandrel with an interior surface and an exterior surface, an anchoring assembly disposed about said mandrel and a sealing element disposed about said mandrel, said method comprising (a) providing a magnetic plug to said downhole tool under a first pressure wherein

said magnetic plug is operationally associated with a magnetic seat defined on said inner surface of said mandrel so as to have a magnetic resistivity such that said magnetic plug is not sealingly engaged with said magnetic seat at said first pressure; (b) introducing said downhole tool into a wellbore to locate said downhole tool at a desired position; (c) moving said downhole tool from an unset position to a set position in which said anchoring assembly anchors to said wellbore so as to prevent movement of said downhole tool and said sealing element seals against said wellbore; and (d) applying a predetermined pressure to said magnetic plug wherein said predetermined pressure is greater than said first pressure such that said magnetic resistivity is overcome so that said magnetic plug is moved into a second position where it sealingly engages said magnetic seat.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 is a schematic view of a portion of a downhole tool utilizing a plug in accordance with an embodiment.

[0008] FIG. 2 is a schematic view of another downhole tool positioned in a wellbore.

[0009] FIG. 3 is a cross-sectional view of the downhole tool of FIG. 2. The downhole tool is illustrated in the unset position with the plug in the open position.

[0010] FIG. 4 is a cross-sectional view of the downhole tool of FIG. 2 illustrated in the set position with the plug in the open position.