In the case of adding a further conventional control mechanism for devices, such as a valve, or sensor downhole; the inventors of the present invention also note limitations since, in the event of a blow-out, the ability to function these devices may be lost due to the inability to fluctuate pressure to control pressure activated devices, or due to the loss of control lines.

Thus it is difficult for a skilled person to design a further safety system which can practically add to the safety systems already provided in oil wells.

An object of the present invention is to mitigate problems with the prior art, and preferably to improve the safety of wells.

According to a first aspect of the present invention there is provided a well including a packer apparatus. The packer apparatus includes a packer and an activation mechanism. The activation mechanism includes an expansion mechanism for expanding the packer and a wireless receiver adapted to receive a wireless control signal and control the activation mechanism. The packer apparatus is provided downhole in any one of the following locations, (i) on a production tubing; (ii) in a casing annulus between two different casing strings; (iii) between the casing and formation; (iv) on a sub-assembly within an uncased section of the well; and (v) on a drill string.

According to a second aspect of the present invention, there is provided a method of drilling, including during a drilling phase providing a drill string including a packer apparatus including: a packer and an activation mechanism. The activation mechanism includes an expansion mechanism for expanding the packer and a wireless receiver adapted to receive a wireless control signal and control the activation mechanism.

According to a third aspect of the present invention, there is provided a method of inhibiting fluid flow from a well. The well includes at least one safety

mechanism, the safety mechanism including: (a) an obstructing member moveable between a first position where fluid flow is permitted, and a second position where fluid flow is restricted; (b) a movement mechanism; (c) a wireless receiver, adapted to receive a wireless signal; wherein the movement mechanism is operable to move the obstructing member from one of the first and second positions to the other of the first and second positions in response to a change in the signal being received by the wireless receiver; (d) a packer; and, (e) an expansion mechanism; and wherein the movement mechanism causes the expansion mechanism to activate which expands the packer and so moves the packer between said first position and said second position. The method includes: in the event of an emergency situation, sending a wireless signal into the well to the safety mechanism.

Thus the present invention provides a significant benefit in that it can move, normally shut, an obstructing member, such as a valve, packer, sleeve or plug in response to a wireless signal. Significantly this is independent of the provision of control lines, such as hydraulic or electric lines, between a well and a wellhead apparatus, for example the BOP. Thus in the event of a disastrous blowout or explosion, a wireless signal can be sent to the valve merely by contacting the wellhead apparatus typically at the top of the well with a wireless transmitter, which will send the appropriate signal. For certain embodiments the wireless transmitter may be mounted onto the wellhead apparatus. Indeed this can be achieved even if the wellhead apparatus has suffered extensive damage, and/or the hydraulic, electric and other control lines have been damaged and the conventional safety systems have lost all functionality, since the wireless signal requires no intact control lines in order