

EMERGENCY SUBSEA WELLHEAD CLOSURE DEVICES

ABSTRACT

Wellhead-based systems, apparatus, and methods for controlling a well are provided. During a failure of an emergency system such as a blowout provider, a wellhead based emergency control apparatus according to an embodiment of the invention can be employed to control the well. A casing strings compression assembly can radially compress each of the casing strings and/or drilling pipe extending through the wellhead housing to restrict or stop well fluid passage. A casing strings penetrator of an emergency well fluid diversion assembly can also or alternatively be employed to form an aperture in the casing strings. A diverter, integral with or connected to the penetrator, is extended through an aperture in a side of the wellhead housing and one or more of the apertures cut by the penetrator to divert well fluid from within the wellhead housing through a passageway in the diverter and to an external conduit.

Figure 2