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(54) Title: CONTROLLED ACTUATION OF A REACTIVE METAL

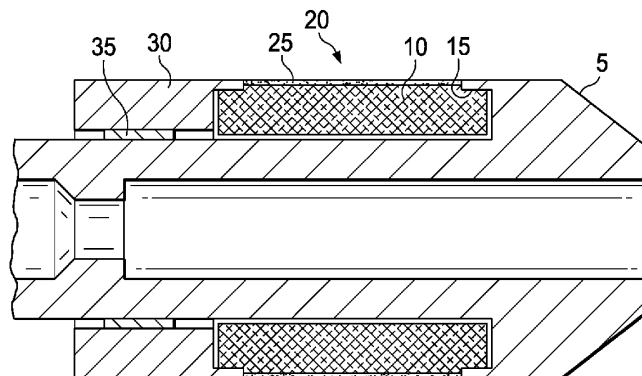


FIG. 2

(57) Abstract: Apparatus and methods for initiating the reaction of a reactive metal element of a downhole device. An example method introduces the downhole device into a wellbore; wherein the downhole device comprises the reactive metal element; wherein the reactive metal element has a first volume; and wherein the reactive metal element is separated from a reaction-inducing fluid by a frangible casing. The frangible casing is removed and the reactive metal element is contacted with the reaction-inducing fluid to produce a reaction product having a second volume greater than the first volume.



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