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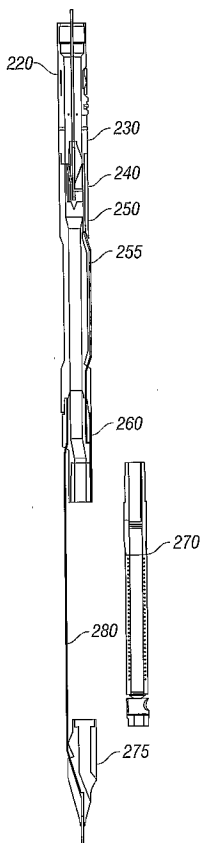
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(54) Title: METHOD AND APPARATUS FOR CONTINUOUSLY INJECTING FLUID IN A WELLBORE WHILE MAINTAINING SAFETY VALVE OPERATION



(57) Abstract: A kit for converting an existing wireline retrievable surface controlled subsurface safety valve (170, 270, 370) into a bypass passageway apparatus (100) allowing the injection of production-enhancing fluid into a wellbore while maintaining the operation of the closure member (374). Bypass passageway (280) can extend between upper (260) and lower (275) adapters external to the existing wireline retrievable surface controlled subsurface safety valve (270) to allow fluid injection bypass thereof. Conversion kit can include a tubing string hanger to suspend a velocity tubing string (407, 507), a gas lift valve (475) for gas lift operations, a locking mandrel (220), and/or a spacer tube (240).

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,454,913 (GUIDRY et al) 19 June 1984(19.06.1984), Fig. 2	1-7,13-18,20-22,24
Y	US 4,482,074 (HINES et al) 27 June 1989 (27.06.1989), column 3, lines 11-24.	1-7,13-18,20-22,24
A	US 3,830,297 (COCKRELL) 20 August 1974 (20.08.1974), whole document.	1-43
A	US 3,827,501 (JOHNSON et al) 6 August 1974 (06.08.1974), whole document.	1-43


Further documents are listed in the continuation of Box C. See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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