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(54) Title: DOWNHOLE TESTER VALVE HAVING RAPID CHARGING CAPABILITIES AND METHOD FOR USE THEREOF

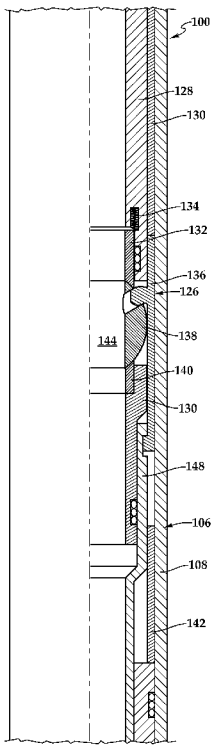


Fig.2B

(57) Abstract: A downhole tester valve (100) includes a housing assembly (106) and a mandrel assembly (172, 174) that define therebetween an operating fluid chamber (176), a biasing fluid chamber (184) and a power fluid chamber (180). A valve assembly (126) disposed within the housing assembly (106) is operable between open and closed positions. A piston assembly (146) is operably associated with the valve assembly (126) such that annulus pressure entering the power fluid chamber (180) pressurizes operating fluid in the operating fluid chamber (176) which acts on the piston assembly (146) to shift the valve assembly (126) from the closed position to the open position and such that predetermined travel of the piston assembly (146) opens a bypass passageway (162) for the pressurized operating fluid to charge biasing fluid in the biasing fluid chamber (184), thereby enabling closure of the valve assembly (126) upon reducing annulus pressure by a predetermined amount.

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