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(54) Title: MULTIPLE ZONE ISOLATION METHOD

(57) Abstract: Multiple producing zones separated by a non-producing zone are gravel packed together. The non-producing zone has locations to take returns so as to get a consistent pack in the non-producing zone. The production string features external seals and/or an internal plug so that no matter which producing zone is aligned to produce, the screens in the non-producing zone are selectively isolated so that the producing zone that is not intended to be produced has only the path through the gravel pack to get to the actual zone being produced. Since the annulus can be long and full of gravel this path will make flow from the zone that is not of interest minimal into the flow from the zone of interest without using a packer between pairs of spaced apart producing zones.

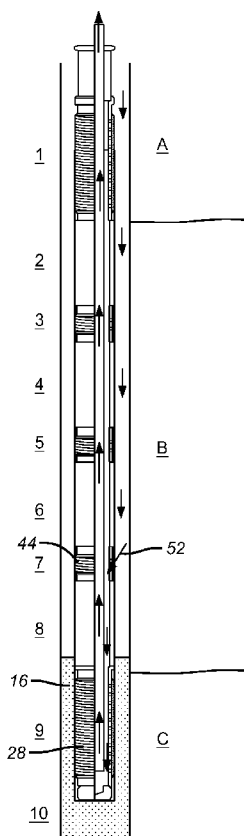


FIG. 4

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ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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AMENDED CLAIMS

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1. A method of subterranean completion, comprising:
 - locating a production screen adjacent each of at least two spaced apart producing zones with said production screens connected with a connecting tubular extending between them and said connecting tubular extending through a non-producing zone to define an annulus that spans said zones;
 - depositing gravel in said annulus adjacent said non-producing zone;
 - connecting a production string to said production screens;
 - using only said deposited gravel to control flow between said producing zones through said annulus while one of said producing zones is producing through its associated production screen and into said production string
 - providing at least one selectively closable opening in said connecting tubular while depositing said gravel.
2. Canceled
3. The method of claim 1, comprising:
 - closing said opening by inserting said production string through said connecting tubular.
4. The method of claim 3, comprising:
 - providing spaced seals on said production tubing to straddle said opening through said connecting tubular and contact an interior wall in said connecting tubular.
5. The method of claim 4, comprising:
 - providing at least one production port in a wall of said production string to align with at least a first production screen to create a flowpath between said first production screen and the surface.
6. The method of claim 5, comprising:
 - providing an opening at the lower end of said production string to create a flowpath between said second production screen and the surface.
7. The method of claim 6, comprising:
 - plugging said opening at said lower end of said production string;
 - producing through said first production screen while isolating said second production screen with said plugging.

8. The method of claim 5, comprising:
providing at least one selectively operated closure on said port in the wall of said production string.
9. The method of claim 8, comprising:
using a sliding sleeve for selective closure of said port.
10. The method of claim 7, comprising:
isolating said first production screen after producing through it;
unplugging said lower end of said production string after isolating said first production screen;
producing through said second production screen after said unplugging of said lower end of said production string.
11. The method of claim 4, comprising:
using at least one screen as said opening in said connecting tubular.
12. The method of claim 11, comprising:
providing at least one selectively closable port between a pair of said spaced seals to create a flowpath from said screen in said connecting tubular to the surface.
13. The method of claim 6, comprising:
closing said production port in the wall of said production string while leaving said lower end open;
producing first through said second production screen while said first production screen is isolated.
14. The method of claim 13, comprising:
plugging said lower end of said production string after producing through said second production screen and thereafter opening said production port in the wall of said production string to subsequently produce from said first production screen.
15. The method of claim 1, comprising:
using no packers outside said connecting tubular.

16. The method of claim 4, comprising:
 - providing a plurality of seals on said production string to be disposed on either side of said opening in said connecting tubular so as to serve as backup for each other and to force any flow from one producing zone to the other to flow first through said gravel packed annular space.