WHAT IS CLAIMED IS:

1. A wellhead sealing assembly, comprising:

a first seal member, the first seal member having inner and outer annular walls to define a slot therebetween;

a first energizing ring concentric with the first seal member and moveable between an upper and a lower position, the first energizing ring slidingly engaging the inner and outer walls to occupy the slot while moving from the upper to the lower position;

a second seal member concentric with and located below the first seal member;

a second energizing ring concentric with and located between the first and second seal members, moveable between a first and a second position, the second energizing ring and the second seal member having mating cylindrical surfaces that slide against one another while moving from the first to the second position, the second seal energizing ring moving from the first position to the second position in response to downward movement of the first seal member; and

a delaying apparatus, the delaying apparatus preventing the first energizing ring from moving to the lower position until after the second energizing ring has moved to the second position.

2. The assembly according to claim 1, wherein downward force on the force on the first energizing ring is transferred through the first seal member to the second energizing ring to cause the second energizing ring to move from the first position to the second position.

3. The assembly according to claim 1, wherein the first seal member and second energizing ring are integrally formed of the same material.

4. The assembly according to Claim 3, wherein the first seal member further comprises first seal threads protruding from a first seal member surface and the second

seal member comprises second seal threads protruding from a second seal member surface, the first seal threads and the second seal threads threadingly engaging and passing through one another so that the second seal member can slidingly move axially along the seal assembly.

5. The assembly according to Claim 4, wherein upward movement of the seal member causes an upper thread of the first seal threads engages a lower thread of the second seal threads to withdraw the second seal.

6. The assembly according to claim 1, wherein the lower sealing member has wickers.

7. The assembly according to Claim 1, wherein the secondary seal is all metal.

8. The assembly according to Claim 1, wherein the primary and secondary seals are all metal.

9. The assembly according to Claim 1, wherein the delaying apparatus comprises a lower end on the first energizing ring having a first tapered surface at an angle oblique to an axis of the ring and extending laterally from the axis of the ring so that when the ring is inserted into the slot the tapered surface contacts an upper edge of one of the walls;

a second tapered surface adjacent the first tapered surface on a side opposite a lower terminal end of the ring, wherein an angle between the second tapered surface and the ring axis is less than the angle between the first tapered surface and axis; and

wherein tapered upward facing shoulders formed on the inner and outer walls of the first seal member have an area that distributes a force applied to the first energizing ring so that sliding engagement of the energizing ring with the inner and outer walls is delayed until the second seal energizing ring moves to the second position.

10. A method for forming a seal between wellbore members, the method comprising:

(a) providing a seal assembly comprising:

a first seal member, the first seal member having inner and outer annular walls to define a slot therebetween;

a first energizing ring concentric with the first seal member and moveable between an upper and a lower position, the first energizing ring slidingly engaging the inner and outer walls to occupy the slot while moving from the upper to the lower position;

a second seal member concentric with and located below the first seal member; and

a second energizing ring concentric with and located between the first and second seal members, moveable between a first and a second position, the second energizing ring and the second seal member having mating cylindrical surfaces that slide against one another while moving from the first to the second position, the second seal energizing ring moving from the first position to the second position in response to downward movement of the first seal member;

(b) lowering the seal assembly into a wellbore until a downward facing shoulder on the second seal member lands on an upward facing shoulder on a wellbore member;

(c) applying downward force on the first energizing ring, the downward force being transferred through the first seal member to the second energizing ring to move the second energizing ring from the first position to the second position relative to the second seal member; and

(d) then continuing to apply downward force on the first energizing ring to cause the first energizing ring to move from the upper to the lower position relative to the first seal member.

11. The method according to Claim 10, wherein the first seal member and second energizing ring are integrally formed as a seal assembly, the seal assembly further comprising seal assembly threads protruding from a seal assembly surface and the second

seal member comprises second seal threads protruding from a second seal member surface, the seal assembly threads and the second seal threads threadingly engaging and passing through one another.

12. The method according to Claim 11, wherein step (c) includes axially sliding the second seal threads along the seal assembly surface.

13. The method according to Claim 11, further comprising the step of withdrawing the second seal member by applying upward axial force on the first energizing ring, the upward force being transferred through the first seal member to the second energizing ring, and an upper thread of the seal assembly threads engages a lower thread of the second seal threads to withdraw the second seal. [make sure spec fully describes]

14. The method according to Claim 10, wherein the second seal member sealingly engages the wellbore member and another wellbore member.

15. The method according to Claim 10, wherein the primary and secondary seals are all metal.

16. A wellbore sealing assembly, the wellbore sealing assembly comprising:

a first wellbore member;

a second wellbore member concentrically located within the first wellbore member, the second wellbore member having an annular space to define an upward facing shoulder;

a seal assembly comprising:

a first seal member, the first seal member having inner and outer annular walls to define a slot therebetween;

a first energizing ring concentric with the first seal member and moveable between an upper and a lower position, the first energizing ring slidingly engaging the inner and outer walls to occupy the slot while moving from the upper to the lower position;

a second seal member concentric with and located below the first seal member;

a second energizing ring concentric with and located between the first and second seal members, moveable between a first and a second position, the second energizing ring and the second seal member having mating cylindrical surfaces that slide against one another while moving from the first to the second position, the second seal energizing ring moving from the first position to the second position in response to downward force on the force on the first energizing ring being transferred through the first seal member to the second energizing ring; and

a delaying apparatus, the delaying apparatus preventing the first energizing ring from moving to the lower position until after the second energizing ring has moved to the second position.

17. The assembly according to Claim 16, wherein the first seal member and second energizing ring are integrally formed of the same material.

18. The assembly according to Claim 16, wherein the lower sealing member has wickers.

19. The assembly according to Claim 16, wherein the primary and secondary seals are all metal.

20. The assembly according to Claim 16, wherein the delaying apparatus comprises a lower end on the first energizing ring having a first tapered surface at an angle oblique to an axis of the ring and extending laterally from the axis of the ring so that when the ring is inserted into the slot the tapered surface contacts an upper edge of one of the walls;

a second tapered surface adjacent the first tapered surface on a side opposite a lower terminal end of the ring, wherein an angle between the second tapered surface and the ring axis is less than the angle between the first tapered surface and axis; and

wherein tapered upward facing shoulders formed on the inner and outer walls of the first seal member have an area that distributes a force applied to the first energizing

ring so that sliding engagement of the energizing ring with the inner and outer walls is delayed until the second seal energizing ring moves to the second position.

CLAIMS

1. A wellhead sealing assembly, comprising:

a first seal member, the first seal member having inner and outer annular walls to define a slot therebetween, the first seal member having first seal threads protruding from a first seal member surface;

a first energizing ring concentric with the first seal member and moveable between an upper and a lower position, the first energizing ring slidingly engaging the inner and outer walls to occupy the slot while moving from the upper to the lower position;

a second seal member concentric with and located below the first seal member, the second seal member having second seal threads protruding from a second seal member surface, the first seal threads and the second seal threads threadingly engaging and passing through one another so that the second seal member can slidingly move axially along the seal assembly;

a second energizing ring concentric with and located between the first and second seal members, the first seal member and second energizing ring being integrally formed of the same material and being moveable between a first and a second position, the second energizing ring and the second seal member having mating cylindrical surfaces that slide against one another while moving from the first to the second position, the second seal energizing ring moving from the first position to the second position in response to downward movement of the first seal member; and

a delaying apparatus, the delaying apparatus preventing the first energizing ring from moving to the lower position until after the second energizing ring has moved to the second position.

2. The assembly according to claim 1, wherein the first energizing ring is operable to transfer a downward force on the energizing ring through the first seal member to the

second energizing ring to cause the second energizing ring to move from the first position to the second position.

3. The assembly according to claim 1, wherein an upper thread of the first seal threads is operable to engage a lower thread of the second seal threads to withdraw the second seal in response to an upward movement of the seal member.

4. The assembly according to claim 1, wherein the lower sealing member has wickers.

5. The assembly according to claim 1, wherein the secondary seal is all metal.

6. The assembly according to claim 1, wherein the primary and secondary seals are all metal.

7. The assembly according to claim 1, wherein the delaying apparatus comprises a lower end on the first energizing ring having a first tapered surface at an angle oblique to an axis of the ring and extending laterally from the axis of the ring so that when the ring is inserted into the slot the tapered surface contacts an upper edge of one of the walls;

a second tapered surface adjacent the first tapered surface on a side opposite a lower terminal end of the ring, wherein an angle between the second tapered surface and the ring axis is less than the angle between the first tapered surface and axis; and

wherein tapered upward facing shoulders formed on the inner and outer walls of the first seal member have an area that distributes a force applied to the first energizing

ring so that sliding engagement of the energizing ring with the inner and outer walls is delayed until the second seal energizing ring moves to the second position.

8. A wellbore sealing assembly, the wellbore sealing assembly comprising:

a first wellbore member;

a second wellbore member concentrically located within the first wellbore member, the second wellbore member having an annular space to define an upward facing shoulder;

a seal assembly comprising:

a first seal member, the first seal member having inner and outer annular walls to define a slot therebetween;

a first energizing ring concentric with the first seal member and moveable between an upper and a lower position, the first energizing ring slidingly engaging the inner and outer walls to occupy the slot while moving from the upper to the lower position;

a second seal member concentric with and located below the first seal member;

a second energizing ring that is integrally formed of the same material as the first seal member and concentric with and located between the first and second seal members, moveable between a first and a second position, the second energizing ring and the second seal member having mating cylindrical surfaces that slide against one another while moving from the first to the second position, the second seal energizing ring being operable to move from the first position to the second position in response to a downward force from a running string acting on the first energizing ring, the downward force being transferred through the first seal member to the second energizing ring; and

a delaying apparatus, the delaying apparatus preventing the first energizing ring from moving to the lower position until after the second energizing ring has moved to the second position.

9. The assembly according to claim 8, wherein the lower sealing member has wickers.

10. The assembly according to claim 8, wherein the primary and secondary seals are all metal.

11. The assembly according to claim 8, wherein the delaying apparatus comprises a lower end on the first energizing ring having a first tapered surface at an angle oblique to an axis of the ring and extending laterally from the axis of the ring so that when the ring is inserted into the slot the tapered surface contacts an upper edge of one of the walls;

a second tapered surface adjacent the first tapered surface on a side opposite a lower terminal end of the ring, wherein an angle between the second tapered surface and the ring axis is less than the angle between the first tapered surface and axis; and

wherein tapered upward facing shoulders formed on the inner and outer walls of the first seal member have an area that distributes a force applied to the first energizing ring so that sliding engagement of the energizing ring with the inner and outer walls is delayed until the second seal energizing ring moves to the second position.