What is claimed is:

1. A submersible pump assembly ~~(10)~~ for transference of a fluid medium with low viscosity, the submersible pump assembly ~~(10)~~ comprising:

a cylinder block ~~(120)~~ having a plurality of cylinders ~~(122, 124)~~ formed therein;

a first port ~~(68)~~ located in fluid communication with the plurality of cylinders ~~(122, 124)~~ and a suction chamber ~~(92)~~;

a second port ~~(70)~~ located in fluid communication with the plurality of cylinders ~~(122, 124)~~ and a pressure chamber ~~(94)~~;

a third port ~~(72)~~ located in fluid communication with the plurality of cylinders ~~(122, 124)~~ and the suction chamber ~~(92)~~;

a respective plurality of pistons ~~(126, 128)~~ slidably received in each of the plurality of cylinders ~~(122, 124)~~;

a drive shaft ~~(90)~~ rotatably supported in the cylinder block ~~(120)~~, the drive shaft ~~(90)~~ being coupled to a drive unit ~~(54)~~;

an inclined leading plate ~~(130)~~ coupled to the plurality of pistons ~~(126, 128)~~ and the drive shaft ~~(90)~~, the inclined leading plate ~~(130)~~ coupled to the plurality of pistons ~~(126, 128)~~ such that the plurality of pistons ~~(126, 128)~~ are configured to be axially driven in a reciprocating motion within the plurality of cylinders ~~(122, 124)~~ upon rotation of the inclined leading plate ~~(130)~~;

a first operational mode wherein the fluid medium is transferred from the first port ~~(68)~~ to the second port ~~(70)~~ during the reciprocating motion of the plurality of pistons ~~(126, 128)~~;

a second operational mode wherein the fluid medium is transferred from the first port ~~(68)~~ to the third port ~~(72)~~; and

a valve plate ~~(156)~~ having a first position and a second position, the valve plate ~~(156)~~ selectively actuatable under control of a drive member ~~(158)~~ between the first position and the second position, the first position corresponding to the first operational mode, the second position corresponding to the second operational mode.

2. The submersible pump assembly ~~(10)~~ as recited in claim 1, wherein a tilt angle of the inclined leading plate ~~(130)~~ is selectively adjustable.

3. The submersible pump assembly ~~(10)~~ as recited in claim 1, further comprising a respective plurality of two-ball links ~~(132, 134)~~ connecting the inclined leading plate ~~(130)~~ to the plurality of pistons ~~(126, 128)~~.

4. The submersible pump assembly as recited in claim 3, further comprising a lubrication subsystem co-located with the two-ball links, the lubrication subsystem reducing a friction between the plurality of pistons, the plurality of two-ball links, and the inclined leading plate.

~~4~~5. The submersible pump assembly ~~(10)~~ as recited in claim 1, further comprising a check valve ~~(146, 148, 150, 152)~~ associated with each of the plurality of pistons ~~(126, 128)~~, the check valve ~~(146, 148, 150, 152)~~ preventing backpressure by opening during an intake stroke and closing during an exhaust stroke.

~~5~~6. The submersible pump assembly ~~(10)~~ as recited in claim 1, further comprising a check valve ~~(146, 148, 150, 152)~~ associated with each of the plurality of pistons ~~(126, 128)~~**.**

7. The submersible pump assembly as recited in claim 1, further comprising two check valves associated with each of the plurality of pistons.

~~8~~6. The submersible pump assembly ~~(10)~~ as recited in claim 1, wherein the first operational mode further comprises active pumping of the fluid medium from the suction chamber ~~(92)~~ to the pressure chamber ~~(94)~~.

97. The submersible pump assembly ~~(10)~~ as recited in claim 1, wherein the second operational mode further comprises inactive pumping of the fluid medium with circulation of the fluid medium through the suction chamber ~~(92)~~.

108. The submersible pump assembly ~~(10)~~ as recited in claim 1, wherein the fluid medium further comprises a medium selected from the group consisting of hydrocarbons, water, and combinations thereof.

11. The submersible pump assembly as recited in claim 10, wherein the hydrocarbons further comprise oil.

12. The submersible pump assembly as recited in claim 10, wherein the hydrocarbons further comprise gas.

913. A submersible pump assembly ~~(10)~~ for transference of a fluid medium with low viscosity, the submersible pump assembly ~~(10)~~ comprising:

a cylinder block ~~(120)~~ having a plurality of cylinders ~~(122, 124)~~ formed therein;

a first port ~~(68)~~ located in fluid communication with the plurality of cylinders ~~(122, 124)~~ and a suction chamber ~~(92)~~;

a second port ~~(70)~~ located in fluid communication with the plurality of cylinders ~~(122, 124)~~ and a pressure chamber ~~(94)~~;

a third port ~~(72)~~ located in fluid communication with the plurality of cylinders ~~(122, 124)~~ and the suction chamber ~~(92)~~;

a respective plurality of pistons ~~(126, 128)~~ slidably received in each of the plurality of cylinders ~~(122, 124)~~;

a drive shaft ~~(90)~~ rotatably supported in the cylinder block ~~(120)~~, the drive shaft ~~(90)~~ being coupled to a drive unit ~~(54)~~;

an inclined leading plate ~~(130)~~ coupled to the plurality of pistons ~~(126, 128)~~ and the drive shaft ~~(90)~~, a tilt angle of the inclined leading plate ~~(130)~~ is selectively adjustable, the inclined leading plate ~~(130)~~ coupled to the plurality of pistons ~~(126, 128)~~

such that the plurality of pistons ~~(126, 128)~~ are configured to be axially driven in a reciprocating motion within the plurality of cylinders ~~(122, 124)~~ upon rotation of the inclined leading plate ~~(130)~~;

a respective plurality of two-ball links ~~(132, 134)~~ connecting the inclined leading plate ~~(130)~~ to the plurality of pistons ~~(126, 128)~~;

a first operational mode wherein the fluid medium is transferred from the first port ~~(68)~~ to the second port ~~(70)~~ during the reciprocating motion of the plurality of pistons ~~(126, 128)~~, the first operational mode including active pumping of the fluid medium from the suction chamber ~~(92)~~ to the pressure chamber ~~(94)~~;

a second operational mode wherein the fluid medium is transferred from the first port ~~(68)~~ to the third port ~~(72)~~, the second operational mode include inactive pumping of the fluid medium with circulation of the fluid medium through the suction chamber ~~(92)~~; and

a valve plate ~~(154)~~ having a first position and a second position, the valve plate ~~(154)~~ selectively actuatable under control of a drive member ~~(158)~~ between the first position and the second position, the first position corresponding to the first operational mode, the second position corresponding to the second operational mode.

14. The submersible pump assembly as recited in claim 13, further comprising two check valves associated with each of the plurality of pistons.

15. The submersible pump assembly as recited in claim 13, wherein the two check valves are respectively located with the associated piston and the cylinder block.

16. The submersible pump assembly as recited in claim 13, wherein the fluid medium further comprises a medium selected from the group consisting of hydrocarbons, water, and combinations thereof.

17. The submersible pump assembly as recited in claim 13, further comprising a check valve associated with each of the plurality of pistons.

18. The submersible pump assembly as recited in claim 13, wherein the hydrocarbons further comprise oil.

19. The submersible pump assembly as recited in claim 18, wherein the hydrocarbons further comprise gas.

~~10~~20. A submersible pump assembly ~~(10)~~ for transference of a fluid medium with low viscosity, the submersible pump assembly ~~(10)~~ comprising:

a cylinder block ~~(120)~~ having a plurality of cylinders ~~(122, 124)~~ formed therein;

a first port ~~(68)~~ located in fluid communication with the plurality of cylinders ~~(122, 124)~~ and a suction chamber ~~(92)~~;

a second port ~~(70)~~ located in fluid communication with the plurality of cylinders ~~(122, 124)~~ and a pressure chamber ~~(94)~~;

a third port ~~(72)~~ located in fluid communication with the plurality of cylinders ~~(122, 124)~~ and the suction chamber ~~(92)~~;

a respective plurality of pistons ~~(126, 128)~~ slidably received in each of the plurality of cylinders ~~(122, 124)~~;

a drive shaft ~~(90)~~ rotatably supported in the cylinder block ~~(120)~~, the drive shaft ~~(90)~~ being coupled to a drive unit ~~(54)~~;

an inclined leading plate ~~(130)~~ coupled to the plurality of pistons ~~(126, 128)~~ and the drive shaft ~~(90)~~, a tilt angle of the inclined leading plate ~~(130)~~ is selectively adjustable, the inclined leading plate ~~(130)~~ coupled to the plurality of pistons ~~(126, 128)~~ such that the plurality of pistons ~~(126, 128)~~ is configured to be axially driven in a reciprocating motion within the plurality of cylinders ~~(122, 124)~~ upon rotation of the inclined leading plate ~~(130)~~;

a respective plurality of two-ball links ~~(132, 134)~~ connecting the inclined leading plate ~~(130)~~ to the plurality of pistons ~~(126, 128)~~;

a lubrication subsystem ~~(144)~~ co-located with the two-ball links ~~(132, 134)~~, the lubrication subsystem ~~(144)~~ reducing a friction between the plurality of pistons ~~(126, 128)~~, the plurality of two-ball links ~~(132, 134)~~, and the inclined leading plate ~~(130)~~;

a first operational mode wherein the fluid medium is transferred from the first port to the second port during the reciprocating motion of the plurality of pistons ~~(126, 128)~~, the first operational mode including active pumping of the fluid medium from the suction chamber ~~(92)~~ to the pressure chamber ~~(94)~~;

a second operational mode wherein the fluid medium is transferred from the first port ~~(68)~~ to the third port ~~(72)~~, the second operational mode including inactive pumping of the fluid medium through the suction chamber ~~(92)~~; and

a valve plate ~~(156)~~ having a first position and a second position, the valve plate ~~(156)~~ selectively actuatable under control of a drive member ~~(158)~~ between the first position and the second position, the first position corresponding to the first operational mode, the second position corresponding to the second operational mode.