## CLAIMS

1. A pilot valve (1, 101, 201) comprising:

a pilot valve body (102, 202) comprising: a chamber (110), a first fluid inlet (20, 120) and a second fluid inlet (22, 122) for providing fluid to said chamber (110), and a fluid outlet (24, 124) for receiving fluid from said chamber (110);

a valve rod (30, 130) arranged at least partly inside said chamber, said valve rod (30, 130) being configured to control fluid flow from said first fluid inlet (20, 120) to said fluid outlet (24, 124) via said chamber (110), and configured to control fluid flow from said second fluid inlet (22, 122) to said fluid outlet (24, 124) via said chamber (110);

a separating element (140) being connected to, and movable with said valve rod (30, 130), said separating element (140) having a first fluid contacting area (142), and a second fluid contacting area (144) arranged on an opposite side to said first fluid contacting area (142),

said first fluid contacting area (142) being configured to be in fluid communication with said first fluid inlet (20, 120) for applying a first force to said separating element (140), and

said second fluid contacting area (144) being configured to be in fluid communication with said second fluid inlet (22, 122) for applying a second force to said separating element (140);

wherein a difference between said first and second forces controls the movement of the separating element (140) and the valve rod (30, 130) in such a way that said valve rod (30, 130) in at least a first position provides for a fluid communication between said first fluid inlet (20, 120) and said fluid outlet (24, 124); and in at least a second position provides for a fluid communication between said second fluid inlet (22, 122) and said fluid outlet (24, 124).

2. A pilot valve according to claim 1, wherein said chamber (110) comprises a first chamber portion (110a) arranged to receive fluid from said first fluid inlet (20, 120), and a second chamber portion (110b) arranged to

receive fluid from said second fluid inlet (22, 122), wherein when said valve rod (30, 130) is in said first position, said first fluid inlet (20, 120), said first chamber portion (110a) and said fluid outlet (24, 124) are in fluid communication with each other, and said second fluid inlet (22, 122) is restricted from being in fluid communication with said fluid outlet (24, 124) by said valve rod (30, 130); and wherein when said valve rod (30, 130) is in said second position said second fluid inlet (22, 122), said second chamber portion (110b) and said fluid outlet (24, 124) are in fluid communication with each other, and said first fluid inlet (20, 120) is restricted from being in fluid communication with said fluid outlet (24, 124) by said valve rod (30, 130).

3. A pilot valve according to claim 2, wherein said chamber (110) comprises a third chamber portion (110c) arranged between said first and second chamber portions (110a, 110b), and wherein said fluid outlet (24, 124) is arranged to receive fluid from said chamber (110) via said third chamber portion (110c).

4. A pilot valve according to any one of claims 2 and 3, wherein said valve rod (30, 130) comprises a fluid conduit (132) for guiding a fluid flow from said first chamber portion (110a) to said first fluid contacting area (142) of the separating element (140) in such a way that said first fluid inlet (20, 120) is in fluid communication with said first fluid contacting area (142).

5. A pilot valve according to claim 4, wherein said fluid conduit (132) extends through said separating element (140).

6. A pilot valve according to any one of the preceding claims, wherein said separating element (140) fluidly separates said first fluid contacting area (142) of said separating element (140) from said second fluid contacting area (144).

7. A pilot valve according to any one of the preceding claims, comprising a valve housing (150), wherein said valve body (102, 202), said

valve rod (30, 130) and said separating element (140) are comprised in said valve housing (150), and said valve housing further comprises a pilot spring (160) arranged to exert a force on at least a part of said first fluid contacting area (142).

8. A pilot valve according to claim 7, wherein said first fluid contacting area (142) of said separating element (140) is facing said pilot spring, and said second fluid contacting area (144) of said separating element (140) is facing said chamber (110).

9. A pilot valve according to any one of claims 7 and 8, wherein said valve rod (30, 130) is configured to be moved from its first position to its second position if a combined force applied to said first fluid contacting area (142) by said pilot spring (160) and fluid in fluid communication with said first fluid inlet (20, 120) is smaller than said second force applied to said second fluid contacting area (144) by fluid in fluid communication with said second fluid inlet (22, 122).

10. A pilot valve according to any one of claims 4-9, when dependent on claim 3, further comprising at least a first sealing element (112) and a second sealing element (114), and wherein said first chamber portion (110a) is arranged to be fluidly sealed from said third chamber portion (110c) by a sealing contact between said valve rod (30, 130) and said first sealing element (112) when said valve rod (30, 130) is in said second position, and wherein said second chamber portion (110b) is arranged to be fluidly sealed from said third chamber portion (110c) by a sealing contact between said valve rod (30, 130) and said second sealing element (114) when said valve rod (30, 130) is in said first position.

11. A pilot valve according to any one of the preceding claims, wherein said valve rod (30, 130) having at least a first valve rod portion (130a), a second valve rod portion (130b), and a third valve rod portion (130c) arranged between said first and second valve rod portions (130a, 130b), each of said

first and second valve rod portions (130a, 130b) having a diameter larger than a diameter of said third valve rod portion (130c).

12. A pilot valve according to claims 10 and 11, wherein when said valve rod (30, 130) is in its first position, said third valve rod portion (130c) is arranged to be at least partly located in said first chamber portion (110a) such that said first fluid inlet (20, 120) is in fluid communication with said fluid outlet (24, 124) via said first and third chamber portions (110a, 110c), and said second valve rod portion is arranged to be at least partly located in both said second chamber portion (110b) and said third chamber portion(110c) such that said second fluid inlet (22, 122) is restricted from being in fluid communication with said fluid outlet (24, 124).

13. A pilot valve according to claim 12, wherein when said valve rod (30, 130) is in its second position, said third valve rod portion (130c) is arranged to be at least partly located in said second chamber portion (110b) such that said second fluid inlet (22, 122) is in fluid communication with said fluid outlet (24, 124) via said second and third chamber portions (110b, 110c), and said first valve rod portion (130a) is arranged to be at least partly located in both said first chamber portion (110a) and said third chamber portion (110c) such that said first fluid inlet (20, 120) is restricted from being in fluid communication with said fluid outlet (24, 124).

14. A pilot valve according to any one of the preceding claims, wherein said separating element (140) comprises a piston or a membrane (143).

15. A fluid distribution system (1000a, 1000b, 1000c) comprising a pilot valve according to any one of claims 1-14, a first fluid conduit for guiding a fluid to said first fluid inlet (20, 120), a second fluid conduit for guiding a fluid to said second fluid inlet (22, 122), and a third fluid conduit for guiding fluid away from said fluid outlet (24, 124), wherein a static pressure of fluid in said first fluid conduit is lower compared to a static pressure of fluid in said second fluid conduit.