**CLAIMS:**

We claim:

1. A spiral wound membrane module comprising,

a membrane having water permeability (A-Value) of at least $8*10^{-5}$ cm/s/bar at 25 $^{o}$C and salt permeability (B-Value) of at least $0.5*10^{-5}$ cm/s at 25 $^{o}$C; and,

a permeate carrier with one or more of: a density of 54 wales per inch or more; flow channel width measured at wide parts of the channel of 215 micrometers or less; or, average flow channel width of 175 micrometers or less.

2. The spiral wound module of claim 1 wherein the permeate carrier has resin coating of 20 wt% or less.

3. The spiral wound module of claim 1 or 2 wherein the density of the permeate carrier is 60 wales per inch or less.

4. The spiral wound module of any one of claims 1 to 3 wherein the permeate carrier has flow channel width measured at narrow parts of the channel of 83 micrometers or more.

5. The spiral wound module of any one of claims 1 to 4 wherein the average flow channel width of the permeate carrier is 121 micrometers or more.

6. The spiral wound module of any one of claims 1 to 5 wherein the permeate carrier has a channel cross-sectional area of $16*10^{-9}$ $m^2$ or more.

7. The module of any one of claims 1 to 6 wherein the water permeability (A-Value) of the membrane is at least $21*10^{-5}$ cm/s/bar at 25 $^{o}$C.

8. The module of any one of claims 1 to 7 wherein the water permeability (A-Value) of the membrane is $45*10^{-5}$ cm/s/bar or less at 25 $^{o}$C.

9. The module of any one of claims 1 to 7 wherein the water permeability (A-Value) of the membrane is $35*10^{-5}$ cm/s/bar at 25 $^{o}$C.

10. The module of any one of claims 1 to 7 wherein the water permeability (A-Value) of the membrane is $30*10^{-5}$ cm/s/bar or less at 25 $^{o}$C.

11. The module of any one of claims 1 to 10 wherein the salt permeability (B-Value) of the membrane is at least $3.2*10^{-5}$ cm/s at 25 $^{o}$C.

12. The module of any one of claims 1 to 10 wherein the salt permeability (B-Value) of the membrane is at least $6*10^{-5}$ cm/s at 25 $^{o}$C.

13. The module of any one of claims 1 to 12 wherein salt permeability (B-Value) of the membrane is $15*10^{-5}$ cm/s or less at 25 $^{o}$C.

14. The module of any one of claims 1 to 12 wherein the salt permeability (B-Value) of the membrane is $11*10^{-5}$ cm/s or less at 25 $^{o}$C.

15. A process for treating water comprising,

feeding water at a pressure of at least 50 bar through a spiral wound membrane module thereby creating a permeate and a retentate,

wherein the module comprises a membrane having water permeability (A-Value) of at least $8*10^{-5}$ cm/s/bar at 25 $^{o}$C and salt permeability (B-Value) of at least $0.5*10^{-5}$ cm/s at 25 $^{o}$C.

16. The process of claim 15 wherein the feed pressure is 70 bar or more.

17. The process of claim 15 wherein the feed pressure is 90 bar or more.

18. The process of claim 15 wherein the feed pressure is in a range of 70-120 bar.

19. The process of any one of claims 15 or 18 wherein the retentate has a salt concentration of 100 g/L or more.

20. The process of any one of claims 15 to 18 wherein the retentate has a salt concentration of 130 g/L or more.

21. The process of any one of claims 15 to 18 wherein the retentate has a salt concentration of 140 g/L or more.

22. The process of any one of claims 15 to 21 wherein the module has a permeate carrier with a density of 54 wales per inch or more.

23. The process of any one of claims 15 to 21 wherein the module has a permeate carrier with flow channel width measured at wide parts of the channel of 215 micrometers or less.

24. The process of any one of claims 15 to 21 wherein the module has a permeate carrier with average flow channel width of 175 micrometers or less.

25. The process of any one of claims 15 to 24 wherein the water permeability (A-Value) of the membrane is $45*10^{-5}$ cm/s/bar or less at 25 $^{o}$C.

26. The process of any one of claims 15 to 24 wherein the water permeability (A-Value) of the membrane is $35*10^{-5}$ cm/s/bar or less at 25 $^{o}$C.

27. The process of any one of claims 15 to 24 wherein the water permeability (A-Value) of the membrane is $30*10^{-5}$ cm/s/bar or less at 25 $^{o}$C.

28. The process of any one of claims 15 to 21 wherein the module has a permeate carrier with resin coating of 20 wt% or less.

29. The process of claim 22 wherein the density of the permeate carrier is 60 wales per inch or less.

30. The process of any one of claims 15 to 21 wherein the module has a permeate carrier with flow channel width measured at narrow parts of the channel of 83 micrometers or more.

31. The process of claim 24 wherein the average flow channel width of the permeate carrier is 121 micrometers or more.

32. The process of any one of claims 15 to 21 wherein the module has a permeate carrier with a channel cross-sectional area of $16*10^{-9}$ $m^2$ or more.

33. The process of any one of claims 15 to 32 wherein the water permeability (A-Value) of the membrane is at least $21*10^{-5}$ cm/s/bar at 25 $^oC$.

34. The process of any one of claims 15 to 33 wherein the salt permeability (B-Value) of the membrane is at least $3.2*10^{-5}$ cm/s at 25 $^oC$.

35. The process of any one of claims 15 to 33 wherein the salt permeability (B-Value) of the membrane is at least $6*10^{-5}$ cm/s at 25 $^oC$.

36. The process of any one of claims 15 to 35 wherein the salt permeability (B-Value) of the membrane is $15*10^{-5}$ cm/s or less at 25 $^oC$.

37. The process of any one of claims 15 to 35 wherein the salt permeability (B-Value) of the membrane is $11*10^{-5}$ cm/s or less at 25 $^oC$.