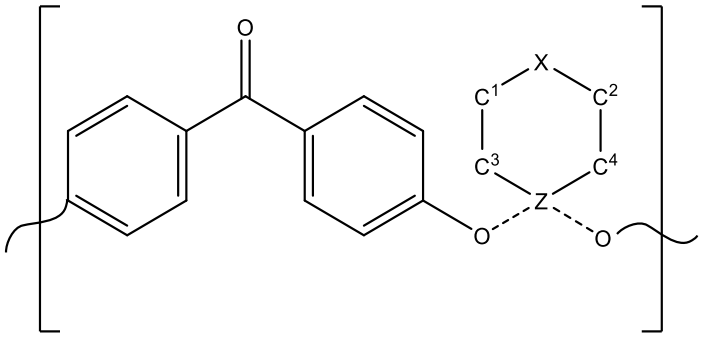
Claims:

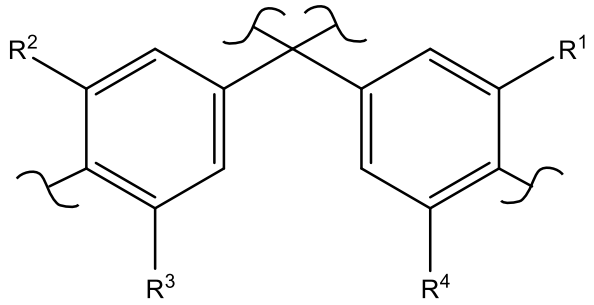
1. Compound containing at least one unit of the formula (I)



(I)

with X being a structure element comprising a nitrogen atom with a positive charge bonded to C^1 and C^2 and bonded via two bonds to one or two hydrocarbon radical(s) comprising 1 to 12, preferably 1 to 6, more preferably 1 or 5 carbon atoms and Z being a structure element comprising a carbon atom being bonded to C^3 and C^4 and at least one aromatic 6-ring directly bonded to one of the oxygen atoms, wherein the aromatic rings might be substituted with one or more halogen and/or one or more C_1- to C_4- alkyl radicals,

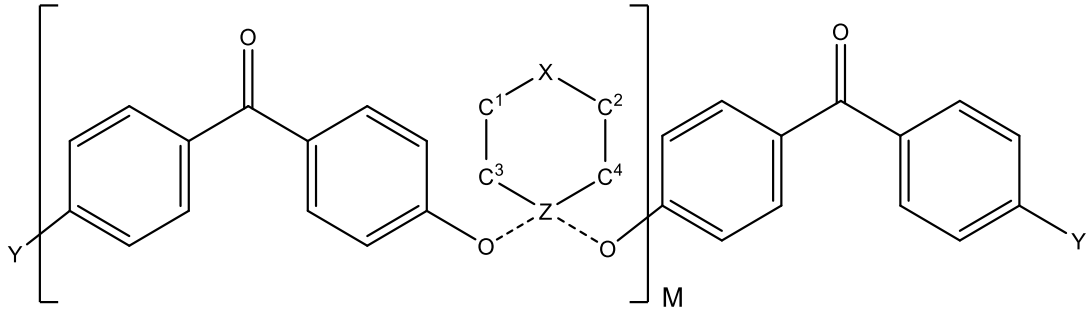
wherein the structure element Z represents a unit of formula (IIIa)



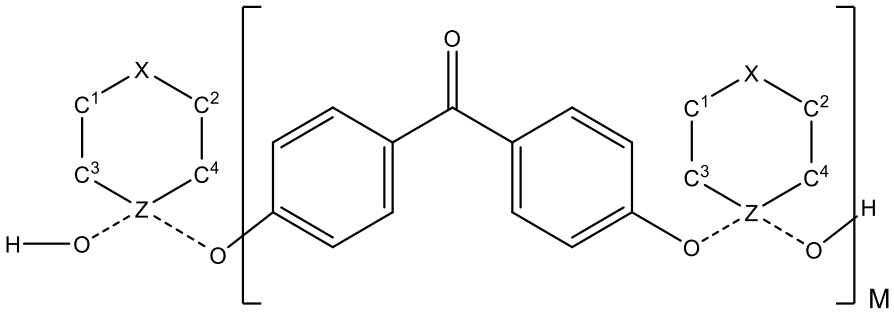
(IIIa)

with R_1, R_2, R_3, and R_4, being the same or different alkyl group having from 1 to 4 carbon atoms.

2. Compound according to Claim 1, wherein the compound is represented by formula (Ia) or (Ib)



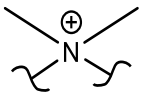
(Ia)



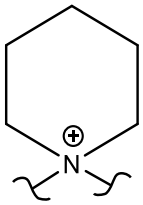
(Ib)

with Y = same or different halogen, preferably F, M being an integer from 1 to 500, preferably 5 to 250, X being a structure element comprising a nitrogen atom with a positive charge bonded to C^1 and C^2 and bonded via two bonds to one or two hydrocarbon radical(s) comprising 1 to 12, preferably 1 to 6, more preferably 1 or 5 carbon atoms and Z being a structure element comprising a carbon atom being bonded to C^3 and C^4 and at least one aromatic 6-ring directly bonded to one of the oxygen atoms, wherein the aromatic rings might be substituted with one or more halogen and/or one or more C_1- to C_4- alkyl radicals.

3. Compound according to Claim 1 or 2, wherein the structure element X represents a unit of formula (IIa) or (IIb)



(IIa)

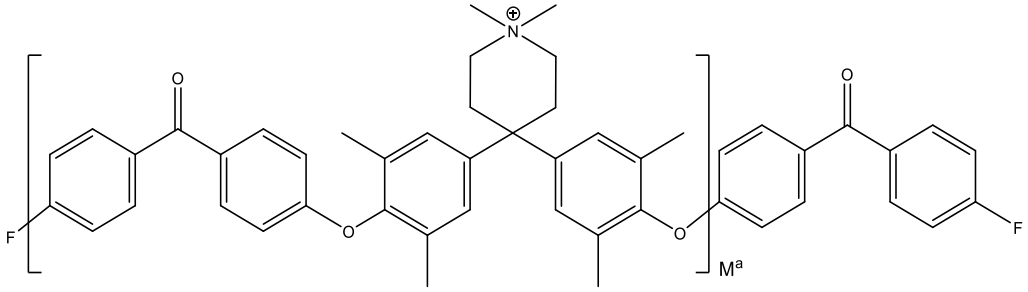


(IIb).

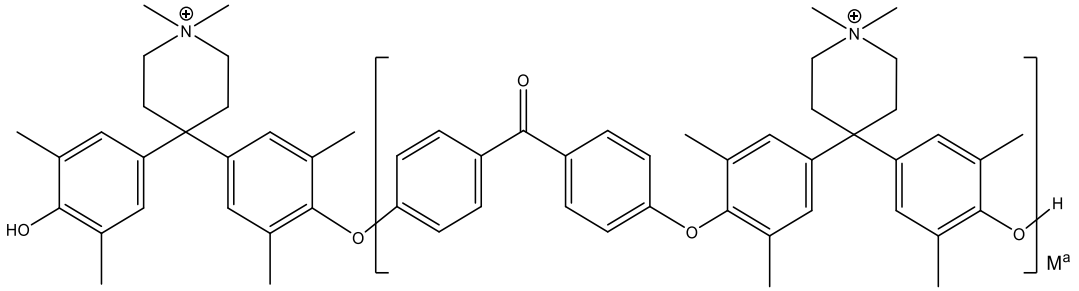
4. Compound according to any one of Claims 1 to 3, wherein the structure element X present represents in more than 50 %, preferably in more than 75 %, and most preferred in more than 90 % of its occurrence a unit of formula (IIa) or (IIb).

5. Compound according to any one of Claims 1 to 4, wherein R_1, R_2, R_3, and R_4 each being a methyl or tert-butyl group, more preferably being a methyl group.

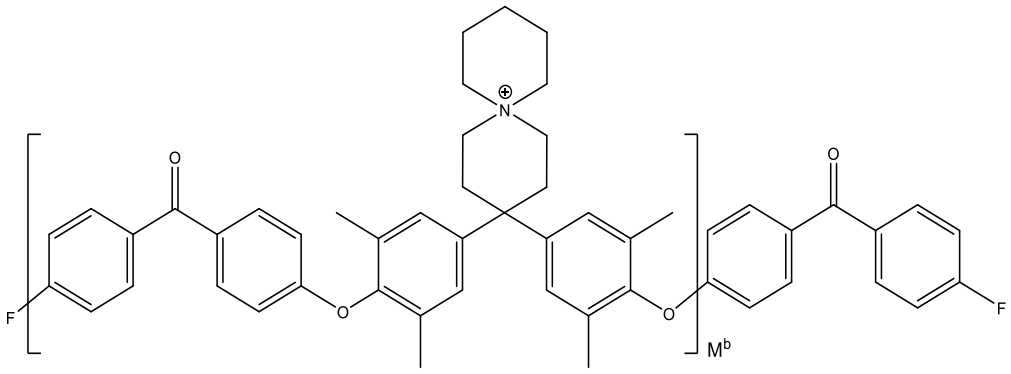
6. Compound according to at least one of Claims 1 to 5, wherein the compound is represented by at least one of formulas (IVa) to (IVd),



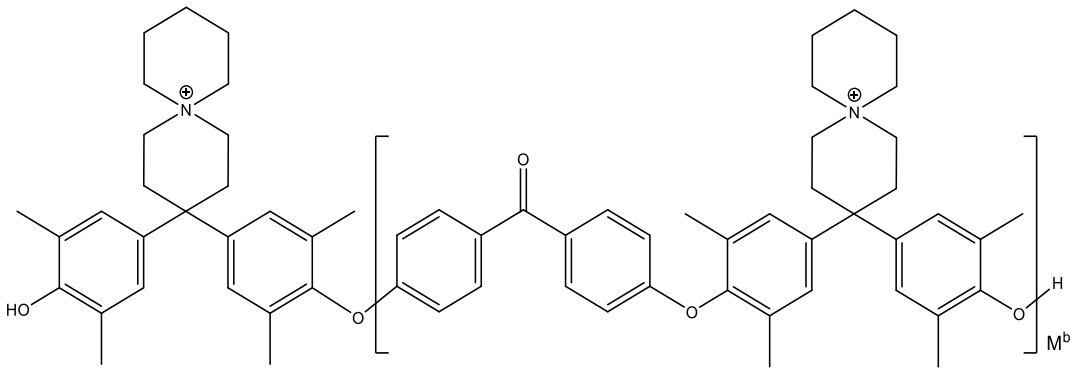
(IVa)



(IVb)



(IVc)

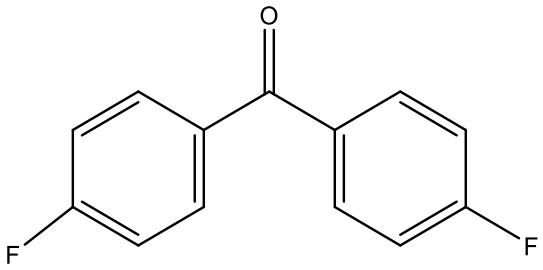


(IVd)

with M^a and M^b being an integer of from 1 to 500, preferably of from 5 to 250, and wherein the aromatic rings might further be substituted with one or more halogen and/or one or more C_1- to C_4-alkyl radicals.

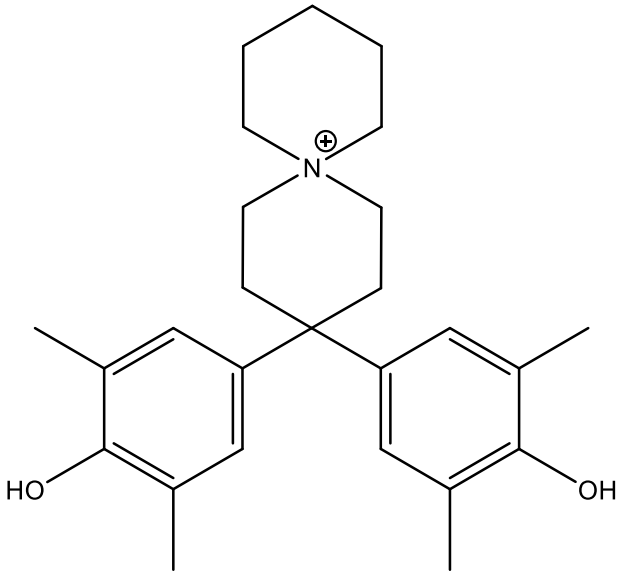
7. Compound according to at least one of Claims 1 to 6, wherein the aromatic rings in the compounds of formula (I), (Ia), (Ib), (IVa), (IVb), (IVc), and (IVd) are not further substituted with one or more halogen or one or more C_1- to C_4- alkyl radicals.

8. Process for preparing compounds according to any one of Claims 1 to 7, wherein it comprises a step in which a compound of the formula (V)

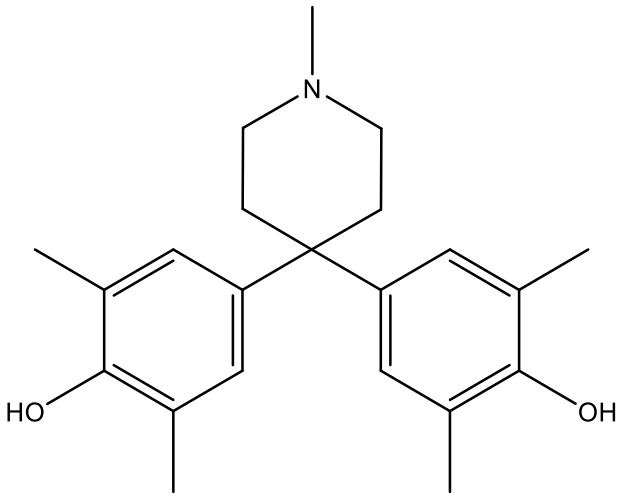


(V)

is reacted with one compound selected from formulas (VIa) to (VIb)



(VIa)



(VIb)

wherein the aromatic rings might further be substituted with one or more halogen and/or one or more C_1- to C_4- alkyl radicals.

9. Process according to Claim 8, wherein it comprises a step where an alkylating reagent, preferably a methylating reagent, is used.

10. Process according to Claim 8 or 9, wherein the aromatic rings in the compounds of formula (V), (VIa), and (VIb) are not further substituted with one or more halogen or one or more C_1- to C_4- alkyl radicals.

11. Use of a compound according to any of Claims 1 to 7 as anion-conducting membrane or for the production of an anion-conducting membrane.

12. Use of a compound according to Claim 11 for production of a component, which is used in an electrochemical process, preferably selected from electrolysis, electrodialysis and fuel cell technology.

13. Electrolyzer, wherein it includes a compound according to any of Claims 1 to 7.