

What is claimed is:

1. A depth filter medium comprising:
a first structural support layer comprising a first porous material;
5 an elastomeric nonwoven web attached to the first structural support layer, wherein the elastomeric nonwoven web comprises elastomeric fibers and has a mean flow pore size of about 15 microns or less;
and wherein said first structural support layer has a mean flow pore size greater than the mean flow pore size of the elastomeric nonwoven web.
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2. The depth filter medium of claim 1, further comprising a second structural support layer comprising a second porous material having a mean flow pore size greater than the mean flow pore size of the elastomeric nonwoven web, said elastomeric nonwoven web being positioned between said first and second structural support layers.
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3. The depth filter medium of claim 2, wherein the second porous material has a mean flow pore size smaller than the mean flow pore size of the first porous material.
4. The depthfiltermedium of claim 2, wherein the second structural layer is selected
20 from a woven material or a mesh having a uniform pore size.
5. The depthfiltermedium of claim 2, wherein the mean flow pore size of the second structural support layer is about 30 microns or less.
- 25 6. The depthfiltermedium of claim 1, wherein the first structural support layer is selected from a woven material or a mesh having a uniform pore size.
7. The depthfiltermedium of claim 1, wherein the mean flow pore size of the first structural support layer is about 30 microns or less.
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8. The depth filter medium of any one of claims 1 to 7, wherein the elastomeric fibers are meltblown or spunbonded fibers.

9. The depth filter medium of any one of claims 1 to 7, wherein the elastomeric nonwoven web has a mean flow pore size of less than about 5 microns.

10. The depth filter medium of any one of claims 1 to 7, wherein the elastomeric fibers
5 comprise a propylene-based elastomer, a styrenic elastomer, a copolyester elastomer, or a polyurethane elastomer.

11. The depth filter medium of any one of claims 1 to 7, wherein the elastomeric nonwoven web comprises two or more elastomeric nonwoven sheets laminated together.
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12. The depth filter medium of any one of claims 1 to 7, wherein the elastomeric nonwoven web has a basis weight of about 500 g/m² or less.

13. The depth filter medium of any one of claim 12, wherein the elastomeric nonwoven
15 web has a basis weight of about 200 g/m² or less.

14. The depth filter medium of claim 1, wherein the first structural support layer comprises a woven material or a mesh having a mean flow pore size of about 30 microns or less; and the elastomeric nonwoven web comprises a single layer of elastomeric nonwoven material or a
20 laminate of multiple layers of elastomeric nonwoven material, the elastomeric nonwoven web having a mean flow pore size of about 10 microns or less and a basis weight of about 200 g/m² or less.

15. A depth filter comprising the depth filter medium of any one of claims 1 to 14, and
25 further comprising a structural frame attached to the depth filter medium.

16. The depth filter of claim 15, wherein the depth filter is adapted for water filtration.

17. A method of making a depth filter, comprising:
30 providing an elastomeric nonwoven web comprising elastomeric fibers and having a mean flow pore size of about 15 microns or less; and

attaching the elastomeric nonwoven web to a first structural support layer to form a depth filter medium,

wherein the first structural support layer is a porous material with a mean flow pore size
35 greater than the mean flow pore size of the elastomeric nonwoven web.

18. The method of claim 17, wherein the providing step comprises meltblowing or spunbonding the elastomeric fibers.

19. The method of claim 17, wherein the attaching step comprises stitching, chemically bonding, thermally bonding, ultrasonic bonding, print adhesive bonding, applying pressure, hydroentangling, or a combination thereof.

20. The method of claim 17, further comprising attaching a second structural support layer to the elastomeric nonwoven web on a side opposite from the first structural support layer, the second structural support layer comprising a second porous material having a mean flow pore size greater than the mean flow pore size of the elastomeric nonwoven web.

21. The method of claim 17, wherein the providing step comprises laminating two or more layers of elastomeric nonwoven material together to form the elastomeric nonwoven web.

22. The method of claim 17, further comprising attaching a structural frame to the depth filter medium.

23. A method of filtering a liquid to remove particulate matter therefrom comprising: contacting a liquid comprising particulate matter with the depth filter medium of any one of claims 1 to 14 to remove a portion of the particulate matter from the liquid by depth filtration or a combination of depth filtration and surface filtration.

24. The method of claim 23, further comprising backwashing the depth filter medium such that at least a portion of the particulate matter captured by the depth filter medium is removed from the depth filter medium, allowing for its reuse in filtration.

25. The method of claim 23, wherein the depth filter medium comprises a second structural support layer comprising a second porous material having a mean flow pore size greater than the mean flow pore size of the elastomeric nonwoven web and a mean flow pore size smaller than the mean flow pore size of the first porous material, said elastomeric nonwoven web being positioned between said first and second structural support layers,

wherein the liquid is contacted with the depth filter medium such that the first structural support layer is upstream and the second structural support layer is downstream during use.

