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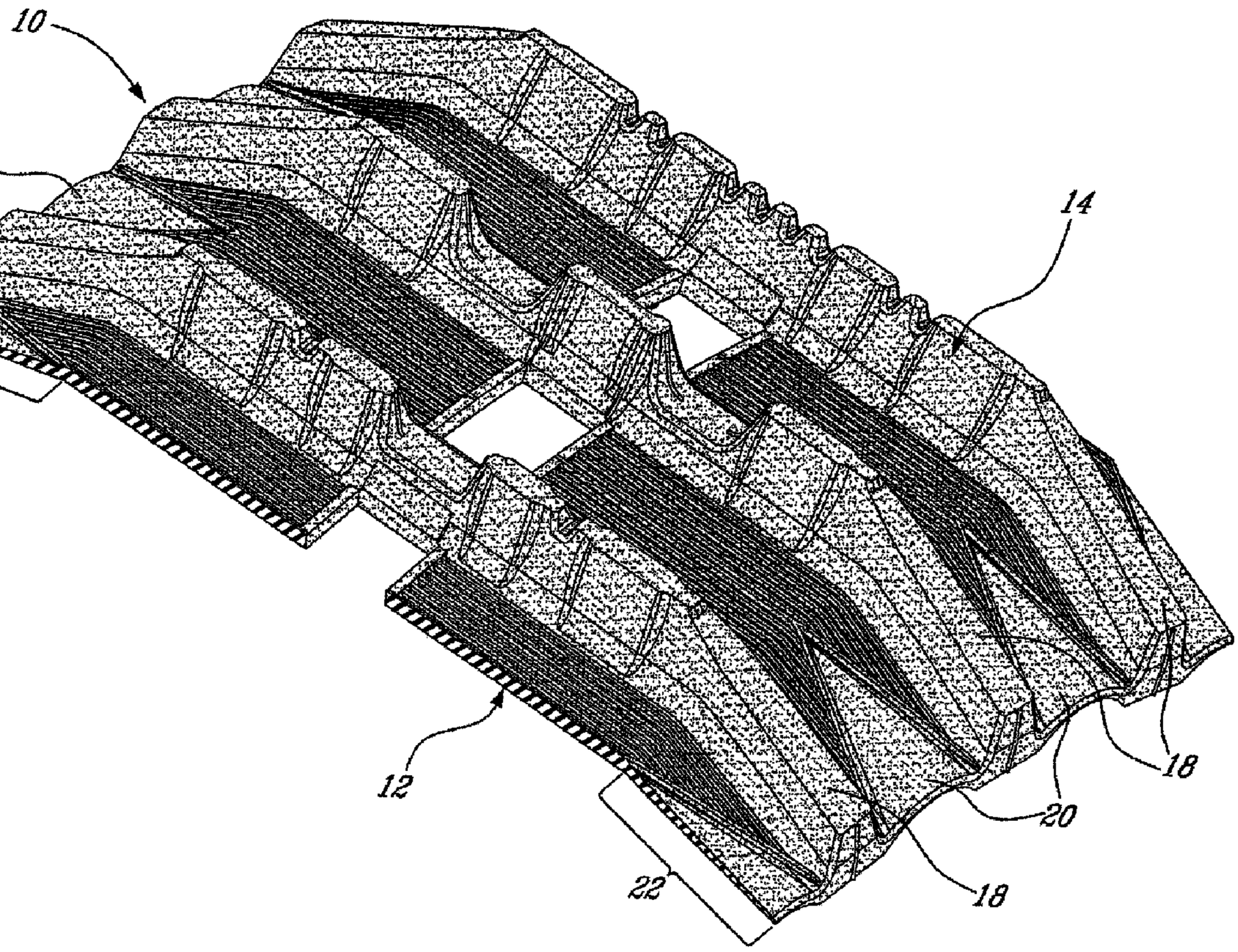


(57) Abrégé/Abstract:
A one-piece track comprising, along each opposite edge thereof, regions having an accordion-type structure, which allows these regions to have a variable longitudinal length along each opposite edge of the track according to a movement of the tracked vehicle and to a corresponding inclination of the track.

ABSTRACT OF THE DISCLOSURE

A one-piece track comprising, along each opposite edge thereof, regions having an accordion-type structure, which allows these regions to have a variable longitudinal length along each opposite edge of the track according to a movement of the tracked vehicle and to a corresponding inclination of the track.

TITLE OF THE INVENTION

MANOEUVRABLE TRACTION TRACK

FIELD OF THE INVENTION

[0001] The present invention relates to tracks for recreational vehicles. More specifically, the present invention is concerned with a manoeuvrable traction track.

BACKGROUND OF THE INVENTION

[0002] US patent no. 5,904,217 discloses an endless track belt for a snowmobile vehicle, wherein the track belt 70 has a right and a left inclined portions 73 formed at laterally opposite end portions of the track belt 70, in order to allow the vehicle to easily bank and turn.

[0003] The Canadian patent application no. 2,037,053 describes a track for a tracked motorcycle and the likes, which allows the vehicle to have a lateral inclination for example in a wide turn. Blocks and straps are used to give the track such a curvature.

[0004] There is still a need in the art for a maneuverable traction track.

SUMMARY OF THE INVENTION

[0005] In accordance with one aspect of the present invention, there is provided an endless track for providing traction to an all-terrain vehicle (ATV). The endless track comprises an endless polymeric body having: a ground-engaging outer surface for engaging the ground on which the ATV moves; and

track comprises an endless body having: a ground-engaging outer surface for engaging the ground on which the ATV moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the ATV. The endless body includes: a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track. The lateral edge portions are bent inwardly relative to the central portion such that the lateral edge parts of the ground-engaging outer surface are bent inwardly relative to the central part of the ground-engaging outer surface and the lateral edge parts of the inner surface are bent inwardly relative to the central part of the inner surface. The endless track also comprises a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track.

[0006A] In accordance with another aspect of the present invention, there is provided an endless track for providing traction to an all-terrain vehicle (ATV). The endless track comprises flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the ATV. The endless track comprises an endless body having: a ground-engaging outer surface for engaging the ground on which the ATV moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the ATV. The endless body includes: a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and a pair of lateral edge portions including a pair of lateral

edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track. The lateral edge portions are bent inwardly relative to the central portion such that the lateral edge parts of the ground-engaging outer surface are bent inwardly relative to the central part of the ground-engaging outer surface and the lateral edge parts of the inner surface are bent inwardly relative to the central part of the inner surface. The endless track also comprises a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track. A transversal rigidity of the endless track is mainly provided by the traction projections.

[0006B] In accordance with another aspect of the present invention, there is provided an endless track for providing traction to a snowmobile. The endless track comprises flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the snowmobile. The endless track comprises an endless body having: a ground-engaging outer surface for engaging the ground on which the snowmobile moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the snowmobile. The endless body includes: a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal

direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track. The lateral edge portions are bent inwardly relative to the central portion such that the lateral edge parts of the ground-engaging outer surface are bent inwardly relative to the central part of the ground-engaging outer surface and the lateral edge parts of the inner surface are bent inwardly relative to the central part of the inner surface. Each of the lateral edge portions is comprises a length-varying region having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the snowmobile. The endless track also comprises a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track.

[0006C] In accordance with another aspect of the present invention, there is provided an endless track belt comprising an endless elongated body with a ground-engaging outer surface and an inner surface. The ground-engaging outer surface comprises longitudinally alternating first and second regions. The first regions are rigid. The second regions have a bellows structure such that they are able to expand and retract longitudinally between the first regions. Lateral edges of the endless track belt are bent.

[0006D] In accordance with another aspect of the present invention, there is provided an endless track belt for a tracked vehicle. The endless track belt comprises an endless elongated body with a ground-engaging outer surface and an inner surface, lateral edges thereof being bent. The ground-engaging outer surface comprises corrugated regions that expand and retract longitudinally according to a movement of the tracked vehicle and to a corresponding inclination of the track longitudinally alternating with rigid regions.

[0006E] In accordance with another aspect of the present invention, there is provided an endless track for providing traction to a tracked vehicle. The endless track comprises flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the tracked vehicle. The endless track comprises an endless body having: a ground-engaging outer surface for engaging the ground on which the tracked vehicle moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the tracked vehicle. The endless body includes: a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track. The lateral edge portions are bent inwardly relative to the central portion such that the lateral edge parts of the ground-engaging outer surface are bent inwardly relative to the central part of the ground-engaging outer surface and the lateral edge parts of the inner surface are bent inwardly relative to the central part of the inner surface. The endless track also comprises a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track. A transversal rigidity of the endless track is mainly provided by the traction projections

[0006F] In accordance with another aspect of the present invention, there is provided an endless track for providing traction to an all-terrain vehicle (ATV). The endless track comprises flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the ATV.

The endless track comprises an endless body having: a ground-engaging outer surface for engaging the ground on which the ATV moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the ATV. The endless body includes a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track. A first one of the lateral edge portions is bent inwardly relative to the central portion such that a first one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a first one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface. The endless track also comprises a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track.

[0006G] In accordance with another aspect of the present invention, there is provided an endless track for providing traction to a tracked vehicle. The endless track comprises flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the tracked vehicle. The endless track comprises an endless body having: a ground-engaging outer surface for engaging the ground on which the tracked vehicle moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the tracked vehicle. The endless body includes: a central portion including a central part of the ground-engaging outer

surface and a central part of the inner surface; and a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track. A first one of the lateral edge portions is bent inwardly relative to the central portion such that a first one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a first one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface. The endless track also comprises a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track. A transversal rigidity of the endless track is mainly provided by the traction projections.

[0006H] In accordance with another aspect of the present invention, there is provided an endless track for providing traction to an all-terrain vehicle (ATV). The endless track comprises flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the ATV. The endless track comprises an endless body having: a ground-engaging outer surface for engaging the ground on which the ATV moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the ATV. The endless body includes: a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part

of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track. The lateral edge portions are bent inwardly relative to the central portion such that the lateral edge parts of the ground-engaging outer surface are bent inwardly relative to the central part of the ground-engaging outer surface and the lateral edge parts of the inner surface are bent inwardly relative to the central part of the inner surface. Each of the lateral edge portions comprises a length-varying region having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the ATV. The endless track also comprises a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track.

[0006I] In accordance with another aspect of the present invention, there is provided an endless track for providing traction to a tracked vehicle. The endless track comprises flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the tracked vehicle. The endless track comprises an endless body having: a ground-engaging outer surface for engaging the ground on which the tracked vehicle moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the tracked vehicle. The endless body includes: a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface

is located between the lateral edge parts of the inner surface in the transversal direction of the endless track. A first one of the lateral edge portions is bent inwardly relative to the central portion such that a first one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a first one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface. The first one of the lateral edge portions comprises a length-varying region having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the tracked vehicle. The endless track also comprises a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track.

[0006J] In accordance with another aspect of the present invention, there is provided an endless track for providing traction to a vehicle on a ground surface. The endless track comprises flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the vehicle. The endless track comprises an endless body including part of the flexible polymeric material and having: a ground-engaging outer surface for engaging the ground surface; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the vehicle. The endless body comprises: a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track. A first one of the lateral edge portions is bent inwardly relative to the central portion such that a first

one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a first one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface. The endless track also comprises a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track. Each traction projection of the plurality of traction projections includes part of the flexible polymeric material. A rigidity of the endless track in the transversal direction of the endless track is mainly provided by the flexible polymeric material.

[0007] Other objects, advantages and features of the present invention will become more apparent upon reading of the following non-restrictive description of embodiments thereof, given by way of example only with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] In the appended drawings:

[0009] Figure 1 is a perspective view of a section of a ground engaging surface of a track according to an embodiment of the present invention; and

[0010] Figure 2 is a perspective view of a section of an inner surface of the track of Figure 1.

DESCRIPTION OF EMBODIMENTS OF THE INVENTION

[0011] As illustrated in the Figures of the appended drawings, an endless track belt 10 comprises an endless elongated body made of polymeric material having a ground contacting outer surface 14 and an inner surface 12.

[0012] The core of the belt may be reinforced as is conventionally known.

[0013] As may be seen in Figure 2, the inner surface 12 comprises a series of longitudinally spaced guide lug members 16, which are adapted to provide guiding of the track on an undercarriage of a tracked vehicle (not shown).

[0014] The ground engaging surface 14, best seen in Figure 1, typically comprises regions 18 bearing a series of longitudinally spaced traction lug members, which provides a transversal rigidity to the track 10. It is found that a profile comprising longitudinally spaced traction lug members of a same height achieves an increased transversal rigidity to the track 10.

[0015] Furthermore, the ground engaging surface 14 of the track 10 comprises regions 20 located essentially between the regions 18. These regions 20 may have a variable longitudinal length along each opposite edge of the track 10, and they have an accordion-type structure, which allows these regions 20 to expand longitudinally or retract longitudinally according to a movement of the tracked vehicle (not shown) and to a corresponding inclination of the track 10.

[0016] In combination with curved lateral edges 22, such an accordion-type structure in regions 20 allows an increased flexibility along a length of the track 10, and thereby an improved maneuverability of the tracked vehicle (not shown), without reducing the transversal rigidity thereof.

[0017] Interestingly, the track 10 is made of standard materials used for a resilient track belt, and is molded as a one piece.

[0018] People in the art will appreciate that the present track, which has lateral edges that are curved and provided with longitudinal accordion-type sections, benefits from a longitudinal flexibility as well as from a transverse rigidity.

[0019] The track of the present invention may be used for recreational vehicles such as, snowmobiles, ATV, as well as for tracked industrial vehicles.

[0020] Although the present invention has been described hereinabove by way of embodiments thereof, it may be modified, without departing from the nature and teachings of the subject invention as described herein.

CLAIMS

1. An endless track for providing traction to an all-terrain vehicle (ATV), the endless track comprising flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the ATV, the endless track comprising:

a) an endless body having: a ground-engaging outer surface for engaging the ground on which the ATV moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the ATV, the endless body including:

- a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and
- a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track;

the lateral edge portions being bent inwardly relative to the central portion such that the lateral edge parts of the ground-engaging outer surface are bent inwardly relative to the central part of the ground-engaging outer surface and the lateral edge parts of the inner surface are bent inwardly relative to the central part of the inner surface; and

b) a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track.

2. The endless track claimed in claim 1, wherein each of the lateral edge portions is bent inwardly relative to the central portion to define an angle between the lateral edge portion and the central portion.

3. The endless track claimed in any one of claims 1 and 2, wherein the lateral edge portions are substantially straight in the transversal direction of the endless track.

4. The endless track claimed in any one of claims 1 to 3, wherein the central portion occupies a majority of a width of the endless track.

5. The endless track claimed in any one of claims 1 to 3, wherein the central portion occupies more than two thirds of a width of the endless track.

6. The endless track claimed in any one of claims 1 to 3, wherein each of the lateral edge portions occupies less than one third of a width of the endless track.

7. The endless track claimed in any one of claims 1 to 3, wherein each of the lateral edge portions occupies less than one quarter of a width of the endless track.

8. The endless track claimed in any one of claims 1 to 7, wherein a maneuverability of the ATV is better than if the lateral edge portions extended generally parallel to the central portion.

9. The endless track claimed in any one of claims 1 to 8, wherein a transversal rigidity of the endless track is mainly provided by the traction projections.

10. The endless track claimed in any one of claims 1 to 9, wherein each of the lateral edge portions comprises a length-varying region having a variable

length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the ATV.

11. The endless track claimed in claim 10, wherein the length-varying region of each of the lateral edge portions is one of a plurality of length-varying regions spaced apart in the longitudinal direction of the endless track, each length-varying region of the plurality of length-varying regions having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the ATV.

12. The endless track claimed in claim 11, wherein the length-varying region includes a structure configured to retract and expand in the longitudinal direction of the endless track as the ATV moves on the ground.

13. The endless track claimed in claim 12, wherein the structure is an accordion-type structure.

14. The endless track claimed in any one of claims 11 to 13, wherein the length-varying region is located between successive ones of the traction projections in the longitudinal direction of the endless track.

15. The endless track claimed in any one of claims 11 to 14, wherein the length-varying region is convex at the ground-engaging outer surface and concave at the inner surface.

16. The endless track claimed in any one of claims 1 to 15, wherein each traction projection of the plurality of traction projections has a longitudinal axis extending transversally to the longitudinal direction of the endless track, a width measured in the longitudinal direction of the endless track, and a height

measured in a thickness direction of the endless track, at least one of the width and the height of the traction projection varying along the longitudinal axis of the traction projection.

17. The endless track claimed in claim 16, wherein each of the width and the height of the traction projection varies along the longitudinal axis of the traction projection.

18. The endless track claimed in claim 16 or 17, wherein the height of the traction projection decreases over each of the lateral edge portions.

19. The endless track claimed in any one of claims 1 to 17, wherein a given one of the traction projections projects outwardly from the central part and the lateral edge parts of the ground-engaging outer surface.

20. The endless track claimed in any one of claims 1 to 17, wherein each of the traction projections projects outwardly from the central part and the lateral edge parts of the ground-engaging outer surface.

21. The endless track claimed in any one of claims 1 to 20, wherein respective ones of the traction projections have different shapes.

22. The endless track claimed in any one of claims 1 to 21, wherein the traction projections have a common maximal height.

23. The endless track claimed in any one of claims 1 to 22, wherein each of the traction projections has a top including a plurality of recesses.

24. The endless track claimed in any one of claims 1 to 23, wherein a thickness of the central portion is greater than a thickness of each of the lateral edge portions.

25. The endless track claimed in any one of claims 1 to 23, wherein a thickness of each of the lateral edge portions decreases in the transversal direction of the endless track.

26. The endless track claimed in any one of claims 1 to 25, wherein the endless body is reinforced.

27. The endless track claimed in any one of claims 1 to 26, comprising a plurality of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track.

28. The endless track claimed in claim 27, wherein the inner projections are guide projections for guiding the endless track around the track-engaging part of the undercarriage of the ATV.

29. The endless track claimed in any one of claims 27 or 28, wherein the plurality of inner projections is a first row of inner projections, the endless track comprising a second row of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track, the second row of inner projections being spaced apart from the first row of inner projections in the transversal direction of the endless track.

30. An ATV equipped with the endless track claimed in any one of claims 1 to 29.

31. An endless track for providing traction to an all-terrain vehicle (ATV), the endless track comprising flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the ATV, the endless track comprising:

a) an endless body having: a ground-engaging outer surface for engaging the ground on which the ATV moves; and an inner surface opposite the

ground-engaging outer surface for facing a track-engaging part of the undercarriage of the ATV, the endless body including:

- a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and
- a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track;

the lateral edge portions being bent inwardly relative to the central portion such that the lateral edge parts of the ground-engaging outer surface are bent inwardly relative to the central part of the ground-engaging outer surface and the lateral edge parts of the inner surface are bent inwardly relative to the central part of the inner surface; and

b) a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track, a transversal rigidity of the endless track being mainly provided by the traction projections.

32. The endless track claimed in claim 31, wherein each of the lateral edge portions is bent inwardly relative to the central portion to define an angle between the lateral edge portion and the central portion.

33. The endless track claimed in any one of claims 31 and 32, wherein the lateral edge portions are substantially straight in the transversal direction of the endless track.

34. The endless track claimed in any one of claims 31 to 33, wherein the central portion occupies a majority of a width of the endless track.

35. The endless track claimed in any one of claims 31 to 33, wherein the central portion occupies more than two thirds of a width of the endless track.

36. The endless track claimed in any one of claims 31 to 33, wherein each of the lateral edge portions occupies less than one third of a width of the endless track.

37. The endless track claimed in any one of claims 31 to 33, wherein each of the lateral edge portions occupies less than one quarter of a width of the endless track.

38. The endless track claimed in any one of claims 31 to 37, wherein a maneuverability of the ATV is better than if the lateral edge portions extended generally parallel to the central portion.

39. The endless track claimed in any one of claims 31 to 38, wherein each of the lateral edge portions comprises a length-varying region having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the ATV.

40. The endless track claimed in claim 39, wherein the length-varying region of each of the lateral edge portions is one of a plurality of length-varying regions spaced apart in the longitudinal direction of the endless track, each length-varying region of the plurality of length-varying regions having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the ATV.

41. The endless track claimed in claim 40, wherein the length-varying region includes a structure configured to retract and expand in the longitudinal direction of the endless track as the ATV moves on the ground.

42. The endless track claimed in claim 41, wherein the structure is an accordion-type structure.

43. The endless track claimed in any one of claims 40 to 42, wherein the length-varying region is located between successive ones of the traction projections in the longitudinal direction of the endless track.

44. The endless track claimed in any one of claims 40 to 43, wherein the length-varying region is convex at the ground-engaging outer surface and concave at the inner surface.

45. The endless track claimed in any one of claims 31 to 44, wherein each traction projection of the plurality of traction projections has a longitudinal axis extending transversally to the longitudinal direction of the endless track, a width measured in the longitudinal direction of the endless track, and a height measured in a thickness direction of the endless track, at least one of the width and the height of the traction projection varying along the longitudinal axis of the traction projection.

46. The endless track claimed in claim 45, wherein each of the width and the height of the traction projection varies along the longitudinal axis of the traction projection.

47. The endless track claimed in claim 45 or 46, wherein the height of the traction projection decreases over each of the lateral edge portions.

48. The endless track claimed in any one of claims 31 to 47, wherein a given one of the traction projections projects outwardly from the central part and the lateral edge parts of the ground-engaging outer surface.

49. The endless track claimed in any one of claims 31 to 47, wherein each of the traction projections projects outwardly from the central part and the lateral edge parts of the ground-engaging outer surface.

50. The endless track claimed in any one of claims 31 to 49, wherein respective ones of the traction projections have different shapes.

51. The endless track claimed in any one of claims 31 to 50, wherein the traction projections have a common maximal height.

52. The endless track claimed in any one of claims 31 to 51, wherein each of the traction projections has a top including a plurality of recesses.

53. The endless track claimed in any one of claims 31 to 52, wherein a thickness of the central portion is greater than a thickness of each of the lateral edge portions.

54. The endless track claimed in any one of claims 31 to 52, wherein a thickness of each of the lateral edge portions decreases in the transversal direction of the endless track.

55. The endless track claimed in any one of claims 31 to 54, wherein the endless body is reinforced.

56. The endless track claimed in any one of claims 31 to 55, comprising a plurality of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track.

57. The endless track claimed in claim 56, wherein the inner projections are guide projections for guiding the endless track around the track-engaging part of the undercarriage of the ATV.

58. The endless track claimed in any one of claims 56 and 57, wherein the plurality of inner projections is a first row of inner projections, the endless track comprising a second row of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track, the second row of inner projections being spaced apart from the first row of inner projections in the transversal direction of the endless track.

59. An ATV equipped with the endless track claimed in any one of claims 31 to 58.

60. An endless track for providing traction to a snowmobile, the endless track comprising flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the snowmobile, the endless track comprising:

a) an endless body having: a ground-engaging outer surface for engaging the ground on which the snowmobile moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the snowmobile, the endless body including:
   - a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and
   - a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in

the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track;

the lateral edge portions being bent inwardly relative to the central portion such that the lateral edge parts of the ground-engaging outer surface are bent inwardly relative to the central part of the ground-engaging outer surface and the lateral edge parts of the inner surface are bent inwardly relative to the central part of the inner surface, each of the lateral edge portions comprising a length-varying region having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the snowmobile; and

b) a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track.

61. The endless track claimed in claim 60, wherein each of the lateral edge portions is bent inwardly relative to the central portion to define an angle between the lateral edge portion and the central portion.

62. The endless track claimed in any one of claims 60 and 61, wherein the lateral edge portions are substantially straight in the transversal direction of the endless track.

63. The endless track claimed in any one of claims 60 to 62, wherein the central portion occupies a majority of a width of the endless track.

64. The endless track claimed in any one of claims 60 to 62, wherein the central portion occupies more than two thirds of a width of the endless track.

65. The endless track claimed in any one of claims 60 to 62, wherein each of the lateral edge portions occupies less than one third of a width of the endless track.

66. The endless track claimed in any one of claims 60 to 62, wherein each of the lateral edge portions occupies less than one quarter of a width of the endless track.

67. The endless track claimed in any one of claims 60 to 66, wherein a transversal rigidity of the endless track is mainly provided by the traction projections.

68. The endless track claimed in any one of claims 60 to 67, wherein the length-varying region of each of the lateral edge portions is one of a plurality of length-varying regions spaced apart in the longitudinal direction of the endless track, each length-varying region of the plurality of length-varying regions having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the snowmobile.

69. The endless track claimed in any one of claims 60 to 68, wherein the length-varying region includes a structure configured to retract and expand in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the snowmobile.

70. The endless track claimed in claim 69, wherein the structure is an accordion-type structure.

71. The endless track claimed in any one of claims 60 to 70, wherein the length-varying region is located between successive ones of the traction projections in the longitudinal direction of the endless track.

72. The endless track claimed in any one of claims 60 to 71, wherein the length-varying region is convex at the ground-engaging outer surface and concave at the inner surface.

73. The endless track claimed in any one of claims 60 to 72, wherein each traction projection of the plurality of traction projections has a longitudinal axis extending transversally to the longitudinal direction of the endless track, a width measured in the longitudinal direction of the endless track, and a height measured in a thickness direction of the endless track, at least one of the width and the height of the traction projection varying along the longitudinal axis of the traction projection.

74. The endless track claimed in claim 73, wherein each of the width and the height of the traction projection varies along the longitudinal axis of the traction projection.

75. The endless track claimed in claim 73 or 74, wherein the height of the traction projection decreases over each of the lateral edge portions.

76. The endless track claimed in any one of claims 60 to 75, wherein a given one of the traction projections projects outwardly from the central part and the lateral edge parts of the ground-engaging outer surface.

77. The endless track claimed in any one of claims 60 to 75, wherein each of the traction projections projects outwardly from the central part and the lateral edge parts of the ground-engaging outer surface.

78. The endless track claimed in any one of claims 60 to 77, wherein respective ones of the traction projections have different shapes.

79. The endless track claimed in any one of claims 60 to 78, wherein the traction projections have a common maximal height.

80. The endless track claimed in any one of claims 60 to 79, wherein each of the traction projections has a top including a plurality of recesses.

81. The endless track claimed in any one of claims 60 to 80, wherein a thickness of the central portion is greater than a thickness of each of the lateral edge portions.

82. The endless track claimed in any one of claims 60 to 80, wherein a thickness of each of the lateral edge portions decreases in the transversal direction of the endless track.

83. The endless track claimed in any one of claims 60 to 82, wherein the endless body is reinforced.

84. The endless track claimed in any one of claims 60 to 83, comprising a plurality of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track.

85. The endless track claimed in claim 84, wherein the inner projections are guide projections for guiding the endless track around the track-engaging part of the undercarriage of the snowmobile.

86. The endless track claimed in any one of claims 84 and 85, wherein the plurality of inner projections is a first row of inner projections, the endless track comprising a second row of inner projections projecting inwardly from

the inner surface and spaced apart in the longitudinal direction of the endless track, the second row of inner projections being spaced apart from the first row of inner projections in the transversal direction of the endless track.

87. A snowmobile equipped with the endless track claimed in any one of claims 60 to 86.

88. An endless track belt comprising an endless elongated body with a ground-engaging outer surface and an inner surface, wherein the ground-engaging outer surface comprises longitudinally alternating first and second regions, said first regions being rigid, said second regions having a bellows structure such that they are able to expand and retract longitudinally between said first regions, and wherein lateral edges of the endless track belt are bent.

89. The endless track belt claimed in claim 88, wherein said first regions bear spaced traction lug members.

90. The endless track belt claimed in claim 89, wherein each of said traction lug members have the same height.

91. The endless track belt claimed in claim 88, wherein said first regions bear traction lug members, wherein each of said traction lug members have the same height.

92. The endless track belt claimed in claim 88, comprising a reinforced core.

93. The endless track belt claimed in claim 88, made of a resilient material.

94. The endless track belt claimed in claim 88, molded as a one piece made of a resilient material.

95. The endless track belt claimed in claim 88, used on one of a recreational vehicle and an industrial vehicle.

96. An endless track belt for a tracked vehicle, the endless track belt comprising an endless elongated body with a ground-engaging outer surface and an inner surface, lateral edges thereof being bent, the ground-engaging outer surface comprising corrugated regions that expand and retract longitudinally according to a movement of the tracked vehicle and to a corresponding inclination of the track longitudinally alternating with rigid regions.

97. The endless track belt claimed in claim 96, used on one of a recreational vehicle and an industrial vehicle.

98. An endless track for providing traction to a tracked vehicle, the endless track comprising flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the tracked vehicle, the endless track comprising:

a) an endless body having: a ground-engaging outer surface for engaging the ground on which the tracked vehicle moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the tracked vehicle, the endless body including:
   - a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and
   - a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the

inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track;

the lateral edge portions being bent inwardly relative to the central portion such that the lateral edge parts of the ground-engaging outer surface are bent inwardly relative to the central part of the ground-engaging outer surface and the lateral edge parts of the inner surface are bent inwardly relative to the central part of the inner surface; and

b) a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track, a transversal rigidity of the endless track being mainly provided by the traction projections.

99. The endless track claimed in claim 98, wherein each of the lateral edge portions is bent inwardly relative to the central portion to define an angle between the lateral edge portion and the central portion.

100. The endless track claimed in any one of claims 98 and 99, wherein the lateral edge portions are substantially straight in the transversal direction of the endless track.

101. The endless track claimed in any one of claims 98 to 100, wherein the central portion occupies a majority of a width of the endless track.

102. The endless track claimed in any one of claims 98 to 100, wherein the central portion occupies more than two thirds of a width of the endless track.

103. The endless track claimed in any one of claims 98 to 100, wherein each of the lateral edge portions occupies less than one third of a width of the endless track.

104. The endless track claimed in any one of claims 98 to 100, wherein each of the lateral edge portions occupies less than one quarter of a width of the endless track.

105. The endless track claimed in any one of claims 98 to 104, wherein a maneuverability of the tracked vehicle is better than if the lateral edge portions extended generally parallel to the central portion.

106. The endless track claimed in any one of claims 98 to 105, wherein each of the lateral edge portions comprises a length-varying region having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the tracked vehicle.

107. The endless track claimed in claim 106, wherein the length-varying region of each of the lateral edge portions is one of a plurality of length-varying regions spaced apart in the longitudinal direction of the endless track, each length-varying region of the plurality of length-varying regions having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the tracked vehicle.

108. The endless track claimed in claim 107, wherein the length-varying region includes a structure configured to retract and expand in the longitudinal direction of the endless track as the tracked vehicle moves on the ground.

109. The endless track claimed in claim 108, wherein the structure is an accordion-type structure.

110. The endless track claimed in any one of claims 107 to 109, wherein the length-varying region is located between successive ones of the traction projections in the longitudinal direction of the endless track.

111. The endless track claimed in any one of claims 107 to 110, wherein the length-varying region is convex at the ground-engaging outer surface and concave at the inner surface.

112. The endless track claimed in any one of claims 98 to 111, wherein each traction projection of the plurality of traction projections has a longitudinal axis extending transversally to the longitudinal direction of the endless track, a width measured in the longitudinal direction of the endless track, and a height measured in a thickness direction of the endless track, at least one of the width and the height of the traction projection varying along the longitudinal axis of the traction projection.

113. The endless track claimed in claim 112, wherein each of the width and the height of the traction projection varies along the longitudinal axis of the traction projection.

114. The endless track claimed in claim 112 or 113, wherein the height of the traction projection decreases over each of the lateral edge portions.

115. The endless track claimed in any one of claims 98 to 114, wherein a given one of the traction projections projects outwardly from the central part and the lateral edge parts of the ground-engaging outer surface.

116. The endless track claimed in any one of claims 98 to 114, wherein each of the traction projections projects outwardly from the central part and the lateral edge parts of the ground-engaging outer surface.

117. The endless track claimed in any one of claims 98 to 116, wherein respective ones of the traction projections have different shapes.

118. The endless track claimed in any one of claims 98 to 117, wherein the traction projections have a common maximal height.

119. The endless track claimed in any one of claims 98 to 118, wherein each of the traction projections has a top including a plurality of recesses.

120. The endless track claimed in any one of claims 98 to 119, wherein a thickness of the central portion is greater than a thickness of each of the lateral edge portions.

121. The endless track claimed in any one of claims 98 to 119, wherein a thickness of each of the lateral edge portions decreases in the transversal direction of the endless track.

122. The endless track claimed in any one of claims 98 to 121, wherein the endless body is reinforced.

123. The endless track claimed in any one of claims 98 to 122, comprising a plurality of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track.

124. The endless track claimed in claim 123, wherein the inner projections are guide projections for guiding the endless track around the track-engaging part of the undercarriage of the tracked vehicle.

125. The endless track claimed in any one of claims 123 and 124, wherein the plurality of inner projections is a first row of inner projections, the endless track comprising a second row of inner projections projecting inwardly from

the inner surface and spaced apart in the longitudinal direction of the endless track, the second row of inner projections being spaced apart from the first row of inner projections in the transversal direction of the endless track.

126. A tracked vehicle equipped with the endless track claimed in any one of claims 98 to 125.

127. The tracked vehicle claimed in claim 126, wherein the tracked vehicle is an all-terrain vehicle (ATV).

128. The tracked vehicle claimed in claim 126, wherein the tracked vehicle is a snowmobile.

129. An endless track for providing traction to an all-terrain vehicle (ATV), the endless track comprising flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the ATV, the endless track comprising:

a) an endless body having: a ground-engaging outer surface for engaging the ground on which the ATV moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the ATV, the endless body including:
   - a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and
   - a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the

inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track;

a first one of the lateral edge portions being bent inwardly relative to the central portion such that a first one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a first one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface; and

b) a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track.

130. The endless track claimed in claim 129, wherein the first one of the lateral edge portions is bent inwardly relative to the central portion to define an angle between the first one of the lateral edge portions and the central portion.

131. The endless track claimed in any one of claims 129 and 130, wherein the first one of the lateral edge portions is substantially straight in the transversal direction of the endless track.

132. The endless track claimed in any one of claims 129 to 131, wherein the central portion occupies a majority of a width of the endless track.

133. The endless track claimed in any one of claims 129 to 131, wherein the central portion occupies more than two thirds of a width of the endless track.

134. The endless track claimed in any one of claims 129 to 131, wherein the first one of the lateral edge portions occupies less than one third of a width of the endless track.

135. The endless track claimed in any one of claims 129 to 131, wherein the first one of the lateral edge portions occupies less than one quarter of a width of the endless track.

136. The endless track claimed in any one of claims 129 to 135, wherein a maneuverability of the ATV is better than if the first one of the lateral edge portions extended generally parallel to the central portion.

137. The endless track claimed in any one of claims 129 to 136, wherein a transversal rigidity of the endless track is mainly provided by the traction projections.

138. The endless track claimed in any one of claims 129 to 137, wherein the first one of the lateral edge portions comprises a length-varying region having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the ATV.

139. The endless track claimed in claim 138, wherein the length-varying region of the first one of the lateral edge portions is one of a plurality of length-varying regions spaced apart in the longitudinal direction of the endless track, each length-varying region of the plurality of length-varying regions having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the ATV.

140. The endless track claimed in claim 139, wherein the length-varying region includes a structure configured to retract and expand in the longitudinal direction of the endless track as the ATV moves on the ground.

141. The endless track claimed in claim 140, wherein the structure is an accordion-type structure.

142. The endless track claimed in any one of claims 139 to 141, wherein the length-varying region is located between successive ones of the traction projections in the longitudinal direction of the endless track.

143. The endless track claimed in any one of claims 139 to 142, wherein the length-varying region is convex at the ground-engaging outer surface and concave at the inner surface.

144. The endless track claimed in any one of claims 129 to 143, wherein each traction projection of the plurality of traction projections has a longitudinal axis extending transversally to the longitudinal direction of the endless track, a width measured in the longitudinal direction of the endless track, and a height measured in a thickness direction of the endless track, at least one of the width and the height of the traction projection varying along the longitudinal axis of the traction projection.

145. The endless track claimed in claim 144, wherein each of the width and the height of the traction projection varies along the longitudinal axis of the traction projection.

146. The endless track claimed in claim 144 or 145, wherein the height of the traction projection decreases over the first one of the lateral edge portions.

147. The endless track claimed in any one of claims 129 to 145, wherein a given one of the traction projections projects outwardly from the central part and the first one of the lateral edge parts of the ground-engaging outer surface.

148. The endless track claimed in any one of claims 129 to 145, wherein each of the traction projections projects outwardly from the central part and the first one of the lateral edge parts of the ground-engaging outer surface.

149. The endless track claimed in any one of claims 129 to 148, wherein respective ones of the traction projections have different shapes.

150. The endless track claimed in any one of claims 129 to 149, wherein the traction projections have a common maximal height.

151. The endless track claimed in any one of claims 129 to 150, wherein each of the traction projections has a top including a plurality of recesses.

152. The endless track claimed in any one of claims 129 to 151, wherein a thickness of the central portion is greater than a thickness of the first one of the lateral edge portions.

153. The endless track claimed in any one of claims 129 to 151, wherein a thickness of the first one of the lateral edge portions decreases in the transversal direction of the endless track.

154. The endless track claimed in any one of claims 129 to 153, wherein the endless body is reinforced.

155. The endless track claimed in any one of claims 129 to 154, comprising a plurality of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track.

156. The endless track claimed in claim 155, wherein the inner projections are guide projections for guiding the endless track around the track-engaging part of the undercarriage of the ATV.

157. The endless track claimed in any one of claims 155 or 156, wherein the plurality of inner projections is a first row of inner projections, the endless track comprising a second row of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track, the second row of inner projections being spaced apart from the first row of inner projections in the transversal direction of the endless track.

158. The endless track claimed in any one of claims 129 to 157, wherein a second one of the lateral edge portions is bent inwardly relative to the central portion such that a second one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a second one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface.

159. An ATV equipped with the endless track claimed in any one of claims 129 to 158.

160. An endless track for providing traction to a tracked vehicle, the endless track comprising flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the tracked vehicle, the endless track comprising:

a) an endless body having: a ground-engaging outer surface for engaging the ground on which the tracked vehicle moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the tracked vehicle, the endless body including:

- a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and

- a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track;

a first one of the lateral edge portions being bent inwardly relative to the central portion such that a first one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a first one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface; and

b) a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track, a transversal rigidity of the endless track being mainly provided by the traction projections.

161. The endless track claimed in claim 160, wherein the first one of the lateral edge portions is bent inwardly relative to the central portion to define an angle between the first one of the lateral edge portions and the central portion.

162. The endless track claimed in any one of claims 160 and 161, wherein the first one of the lateral edge portions is substantially straight in the transversal direction of the endless track.

163. The endless track claimed in any one of claims 160 to 162, wherein the central portion occupies a majority of a width of the endless track.

164. The endless track claimed in any one of claims 160 to 162, wherein the central portion occupies more than two thirds of a width of the endless track.

165. The endless track claimed in any one of claims 160 to 162, wherein the first one of the lateral edge portions occupies less than one third of a width of the endless track.

166. The endless track claimed in any one of claims 160 to 162, wherein the first one of the lateral edge portions occupies less than one quarter of a width of the endless track.

167. The endless track claimed in any one of claims 160 to 166, wherein a maneuverability of the tracked vehicle is better than if the first one of the lateral edge portions extended generally parallel to the central portion.

168. The endless track claimed in any one of claims 160 to 167, wherein the first one of the lateral edge portions comprises a length-varying region having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the tracked vehicle.

169. The endless track claimed in claim 168, wherein the length-varying region of the first one of the lateral edge portions is one of a plurality of length-varying regions spaced apart in the longitudinal direction of the endless track, each length-varying region of the plurality of length-varying regions having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the tracked vehicle.

170. The endless track claimed in claim 169, wherein the length-varying region includes a structure configured to retract and expand in the longitudinal direction of the endless track as the tracked vehicle moves on the ground.

171. The endless track claimed in claim 170, wherein the structure is an accordion-type structure.

172. The endless track claimed in any one of claims 169 to 171, wherein the length-varying region is located between successive ones of the traction projections in the longitudinal direction of the endless track.

173. The endless track claimed in any one of claims 169 to 172, wherein the length-varying region is convex at the ground-engaging outer surface and concave at the inner surface.

174. The endless track claimed in any one of claims 160 to 173, wherein each traction projection of the plurality of traction projections has a longitudinal axis extending transversally to the longitudinal direction of the endless track, a width measured in the longitudinal direction of the endless track, and a height measured in a thickness direction of the endless track, at least one of the width and the height of the traction projection varying along the longitudinal axis of the traction projection.

175. The endless track claimed in claim 174, wherein each of the width and the height of the traction projection varies along the longitudinal axis of the traction projection.

176. The endless track claimed in claim 174 or 175, wherein the height of the traction projection decreases over the first one of the lateral edge portions.

177. The endless track claimed in any one of claims 160 to 176, wherein a given one of the traction projections projects outwardly from the central part and the first one of the lateral edge parts of the ground-engaging outer surface.

178. The endless track claimed in any one of claims 160 to 176, wherein each of the traction projections projects outwardly from the central part and the first one of the lateral edge parts of the ground-engaging outer surface.

179. The endless track claimed in any one of claims 160 to 178, wherein respective ones of the traction projections have different shapes.

180. The endless track claimed in any one of claims 160 to 179, wherein the traction projections have a common maximal height.

181. The endless track claimed in any one of claims 160 to 180, wherein each of the traction projections has a top including a plurality of recesses.

182. The endless track claimed in any one of claims 160 to 181, wherein a thickness of the central portion is greater than a thickness of the first one of the lateral edge portions.

183. The endless track claimed in any one of claims 160 to 181, wherein a thickness of the first one of the lateral edge portions decreases in the transversal direction of the endless track.

184. The endless track claimed in any one of claims 160 to 183, wherein the endless body is reinforced.

185. The endless track claimed in any one of claims 160 to 184, comprising a plurality of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track.

186. The endless track claimed in claim 185, wherein the inner projections are guide projections for guiding the endless track around the track-engaging part of the undercarriage of the tracked vehicle.

187. The endless track claimed in any one of claims 185 and 124, wherein the plurality of inner projections is a first row of inner projections, the endless track comprising a second row of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track, the second row of inner projections being spaced apart from the first row of inner projections in the transversal direction of the endless track.

188. The endless track claimed in any one of claims 160 to 187, wherein a second one of the lateral edge portions is bent inwardly relative to the central portion such that a second one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a second one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface.

189. A tracked vehicle equipped with the endless track claimed in any one of claims 160 to 188.

190. The tracked vehicle claimed in claim 189, wherein the tracked vehicle is an all-terrain vehicle (ATV).

191. The tracked vehicle claimed in claim 189, wherein the tracked vehicle is a snowmobile.

192. An endless track for providing traction to an all-terrain vehicle (ATV), the endless track comprising flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the ATV, the endless track comprising:

a) an endless body having: a ground-engaging outer surface for engaging the ground on which the ATV moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the ATV, the endless body including:

- a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and
- a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track;

the lateral edge portions being bent inwardly relative to the central portion such that the lateral edge parts of the ground-engaging outer surface are bent inwardly relative to the central part of the ground-engaging outer surface and the lateral edge parts of the inner surface are bent inwardly relative to the central part of the inner surface, each of the lateral edge portions comprising a length-varying region having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the ATV; and

b) a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track.

193. The endless track claimed in claim 192, wherein each of the lateral edge portions is bent inwardly relative to the central portion to define an angle between the lateral edge portion and the central portion.

194. The endless track claimed in any one of claims 192 and 193, wherein the lateral edge portions are substantially straight in the transversal direction of the endless track.

195. The endless track claimed in any one of claims 192 to 194, wherein the central portion occupies a majority of a width of the endless track.

196. The endless track claimed in any one of claims 192 to 194, wherein the central portion occupies more than two thirds of a width of the endless track.

197. The endless track claimed in any one of claims 192 to 194, wherein each of the lateral edge portions occupies less than one third of a width of the endless track.

198. The endless track claimed in any one of claims 192 to 194, wherein each of the lateral edge portions occupies less than one quarter of a width of the endless track.

199. The endless track claimed in any one of claims 192 to 198, wherein a transversal rigidity of the endless track is mainly provided by the traction projections.

200. The endless track claimed in any one of claims 192 to 199, wherein the length-varying region of each of the lateral edge portions is one of a plurality of length-varying regions spaced apart in the longitudinal direction of the endless track, each length-varying region of the plurality of length-varying regions having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the ATV.

201. The endless track claimed in claim 200, wherein the length-varying region includes a structure configured to retract and expand in the longitudinal direction of the endless track as the ATV moves on the ground.

202. The endless track claimed in claim 201, wherein the structure is an accordion-type structure.

203. The endless track claimed in any one of claims 200 to 202, wherein the length-varying region is located between successive ones of the traction projections in the longitudinal direction of the endless track.

204. The endless track claimed in any one of claims 200 to 203, wherein the length-varying region is convex at the ground-engaging outer surface and concave at the inner surface.

205. The endless track claimed in any one of claims 192 to 204, wherein each traction projection of the plurality of traction projections has a longitudinal axis extending transversally to the longitudinal direction of the endless track, a width measured in the longitudinal direction of the endless track, and a height measured in a thickness direction of the endless track, at least one of the width and the height of the traction projection varying along the longitudinal axis of the traction projection.

206. The endless track claimed in claim 205, wherein each of the width and the height of the traction projection varies along the longitudinal axis of the traction projection.

207. The endless track claimed in claim 205 or 206, wherein the height of the traction projection decreases over each of the lateral edge portions.

208. The endless track claimed in any one of claims 192 to 207, wherein a given one of the traction projections projects outwardly from the central part and the lateral edge parts of the ground-engaging outer surface.

209. The endless track claimed in any one of claims 192 to 207, wherein each of the traction projections projects outwardly from the central part and the lateral edge parts of the ground-engaging outer surface.

210. The endless track claimed in any one of claims 192 to 209, wherein respective ones of the traction projections have different shapes.

211. The endless track claimed in any one of claims 192 to 210, wherein the traction projections have a common maximal height.

212. The endless track claimed in any one of claims 192 to 211, wherein each of the traction projections has a top including a plurality of recesses.

213. The endless track claimed in any one of claims 192 to 212, wherein a thickness of the central portion is greater than a thickness of each of the lateral edge portions.

214. The endless track claimed in any one of claims 192 to 212, wherein a thickness of each of the lateral edge portions decreases in the transversal direction of the endless track.

215. The endless track claimed in any one of claims 192 to 214, wherein the endless body is reinforced.

216. The endless track claimed in any one of claims 192 to 215, comprising a plurality of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track.

217. The endless track claimed in claim 216, wherein the inner projections are guide projections for guiding the endless track around the track-engaging part of the undercarriage of the ATV.

218. The endless track claimed in any one of claims 216 and 217, wherein the plurality of inner projections is a first row of inner projections, the endless track comprising a second row of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track, the second row of inner projections being spaced apart from the first row of inner projections in the transversal direction of the endless track.

219. An all-terrain vehicle (ATV) equipped with the endless track claimed in any one of claims 192 to 218.

220. An endless track for providing traction to a tracked vehicle, the endless track comprising flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the tracked vehicle, the endless track comprising:

a) an endless body having: a ground-engaging outer surface for engaging the ground on which the tracked vehicle moves; and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the tracked vehicle, the endless body including:

- a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and
- a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track;

a first one of the lateral edge portions being bent inwardly relative to the central portion such that a first one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a first one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface, the first one of the lateral edge portions comprising a length-varying region having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the tracked vehicle; and

b) a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track.

221. The endless track claimed in claim 220, wherein the first one of the lateral edge portions is bent inwardly relative to the central portion to define an angle between the first one of the lateral edge portions and the central portion.

222. The endless track claimed in any one of claims 220 and 221, wherein the first one of the lateral edge portions is substantially straight in the transversal direction of the endless track.

223. The endless track claimed in any one of claims 220 to 222, wherein the central portion occupies a majority of a width of the endless track.

224. The endless track claimed in any one of claims 220 to 222, wherein the central portion occupies more than two thirds of a width of the endless track.

225. The endless track claimed in any one of claims 220 to 222, wherein the first one of the lateral edge portions occupies less than one third of a width of the endless track.

226. The endless track claimed in any one of claims 220 to 222, wherein the first one of the lateral edge portions occupies less than one quarter of a width of the endless track.

227. The endless track claimed in any one of claims 220 to 226, wherein a transversal rigidity of the endless track is mainly provided by the traction projections.

228. The endless track claimed in any one of claims 220 to 227, wherein the length-varying region of the first one of the lateral edge portions is one of a plurality of length-varying regions spaced apart in the longitudinal direction of the endless track, each length-varying region of the plurality of length-varying regions having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the tracked vehicle.

229. The endless track claimed in claim 228, wherein the length-varying region includes a structure configured to retract and expand in the longitudinal direction of the endless track as the tracked vehicle moves on the ground.

230. The endless track claimed in claim 229, wherein the structure is an accordion-type structure.

231. The endless track claimed in any one of claims 228 to 230, wherein the length-varying region is located between successive ones of the traction projections in the longitudinal direction of the endless track.

232. The endless track claimed in any one of claims 228 to 231, wherein the length-varying region is convex at the ground-engaging outer surface and concave at the inner surface.

233. The endless track claimed in any one of claims 220 to 232, wherein each traction projection of the plurality of traction projections has a longitudinal axis extending transversally to the longitudinal direction of the endless track, a width measured in the longitudinal direction of the endless track, and a height measured in a thickness direction of the endless track, at least one of the width and the height of the traction projection varying along the longitudinal axis of the traction projection.

234. The endless track claimed in claim 233, wherein each of the width and the height of the traction projection varies along the longitudinal axis of the traction projection.

235. The endless track claimed in claim 233 or 234, wherein the height of the traction projection decreases over the first one of the lateral edge portions.

236. The endless track claimed in any one of claims 220 to 235, wherein a given one of the traction projections projects outwardly from the central part and the first one of the lateral edge parts of the ground-engaging outer surface.

237. The endless track claimed in any one of claims 220 to 235, wherein each of the traction projections projects outwardly from the central part and the first one of the lateral edge parts of the ground-engaging outer surface.

238. The endless track claimed in any one of claims 220 to 237, wherein respective ones of the traction projections have different shapes.

239. The endless track claimed in any one of claims 220 to 238, wherein the traction projections have a common maximal height.

240. The endless track claimed in any one of claims 220 to 239, wherein each of the traction projections has a top including a plurality of recesses.

241. The endless track claimed in any one of claims 220 to 240, wherein a thickness of the central portion is greater than a thickness of the first one of the lateral edge portions.

242. The endless track claimed in any one of claims 220 to 240, wherein a thickness of the first one of the lateral edge portions decreases in the transversal direction of the endless track.

243. The endless track claimed in any one of claims 220 to 242, wherein the endless body is reinforced.

244. The endless track claimed in any one of claims 220 to 243, comprising a plurality of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track.

245. The endless track claimed in claim 244, wherein the inner projections are guide projections for guiding the endless track around the track-engaging part of the undercarriage of the tracked vehicle.

246. The endless track claimed in any one of claims 244 and 245, wherein the plurality of inner projections is a first row of inner projections, the endless track comprising a second row of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track, the second row of inner projections being spaced apart from the first row of inner projections in the transversal direction of the endless track.

247. The endless track claimed in any one of claims 220 to 246, wherein a second one of the lateral edge portions is bent inwardly relative to the central portion such that a second one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a second one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface.

248. A tracked vehicle equipped with the endless track claimed in any one of claims 220 to 247.

249. The tracked vehicle claimed in claim 248, wherein the tracked vehicle is an all-terrain vehicle (ATV).

250. The tracked vehicle claimed in claim 248, wherein the tracked vehicle is a snowmobile.

251. An endless track for providing traction to a vehicle on a ground surface, the endless track comprising flexible polymeric material to flex in a longitudinal direction of the endless track around an undercarriage of the vehicle, the endless track comprising:

a) an endless body including part of the flexible polymeric material and having: a ground-engaging outer surface for engaging the ground surface;

and an inner surface opposite the ground-engaging outer surface for facing a track-engaging part of the undercarriage of the vehicle, the endless body comprising:

- a central portion including a central part of the ground-engaging outer surface and a central part of the inner surface; and
- a pair of lateral edge portions including a pair of lateral edge parts of the ground-engaging outer surface and a pair of lateral edge parts of the inner surface, the central portion being located between the lateral edge portions in a transversal direction of the endless track such that the central part of the ground-engaging outer surface is located between the lateral edge parts of the ground-engaging outer surface in the transversal direction of the endless track and the central part of the inner surface is located between the lateral edge parts of the inner surface in the transversal direction of the endless track;

a first one of the lateral edge portions being bent inwardly relative to the central portion such that a first one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a first one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface; and

b) a plurality of traction projections projecting outwardly from the ground-engaging outer surface and spaced apart in the longitudinal direction of the endless track, each traction projection of the plurality of traction projections including part of the flexible polymeric material;

wherein a rigidity of the endless track in the transversal direction of the endless track is mainly provided by the flexible polymeric material.

252. The endless track claimed in claim 251, wherein the first one of the lateral edge portions is bent inwardly relative to the central portion to define an angle between the first one of the lateral edge portions and the central portion.

253. The endless track claimed in any one of claims 251 and 252, wherein the first one of the lateral edge portions is substantially straight in the transversal direction of the endless track.

254. The endless track claimed in any one of claims 251 to 253, wherein the central portion occupies a majority of a width of the endless track.

255. The endless track claimed in any one of claims 251 to 253, wherein the central portion occupies more than two thirds of a width of the endless track.

256. The endless track claimed in any one of claims 251 to 253, wherein the first one of the lateral edge portions occupies less than one third of a width of the endless track.

257. The endless track claimed in any one of claims 251 to 253, wherein the first one of the lateral edge portions occupies less than one quarter of a width of the endless track.

258. The endless track claimed in any one of claims 251 to 257, wherein a maneuverability of the vehicle is better than if the first one of the lateral edge portions extended generally parallel to the central portion.

259. The endless track claimed in any one of claims 251 to 258, wherein the first one of the lateral edge portions comprises a length-varying region having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the vehicle.

260. The endless track claimed in claim 259, wherein the length-varying region of the first one of the lateral edge portions is one of a plurality of length-varying regions spaced apart in the longitudinal direction of the endless track,

each length-varying region of the plurality of length-varying regions having a variable length in the longitudinal direction of the endless track when the endless track flexes in the longitudinal direction of the endless track around the undercarriage of the vehicle.

261. The endless track claimed in claim 259, wherein the length-varying region includes a structure configured to retract and expand in the longitudinal direction of the endless track as the vehicle moves on the ground.

262. The endless track claimed in claim 261, wherein the structure is an accordion-type structure.

263. The endless track claimed in any one of claims 169 to 171, wherein the length-varying region is located between successive ones of the traction projections in the longitudinal direction of the endless track.

264. The endless track claimed in any one of claims 259 to 263, wherein the length-varying region is convex at the ground-engaging outer surface and concave at the inner surface.

265. The endless track claimed in any one of claims 251 to 264, wherein the traction projection has a longitudinal axis extending transversally to the longitudinal direction of the endless track, a width measured in the longitudinal direction of the endless track, and a height measured in a thickness direction of the endless track, at least one of the width and the height of the traction projection varying along the longitudinal axis of the traction projection.

266. The endless track claimed in claim 265, wherein each of the width and the height of the traction projection varies along the longitudinal axis of the traction projection.

267. The endless track claimed in claim 265 or 266, wherein the height of the traction projection decreases over the first one of the lateral edge portions.

268. The endless track claimed in any one of claims 251 to 267, wherein a given one of the traction projections projects outwardly from the central part and the first one of the lateral edge parts of the ground-engaging outer surface.

269. The endless track claimed in any one of claims 251 to 267, wherein each of the traction projections projects outwardly from the central part and the first one of the lateral edge parts of the ground-engaging outer surface.

270. The endless track claimed in any one of claims 251 to 269, wherein respective ones of the traction projections have different shapes.

271. The endless track claimed in any one of claims 251 to 270, wherein the traction projections have a common maximal height.

272. The endless track claimed in any one of claims 251 to 271, wherein each of the traction projections has a top including a plurality of recesses.

273. The endless track claimed in any one of claims 251 to 272, wherein a thickness of the central portion is greater than a thickness of the first one of the lateral edge portions.

274. The endless track claimed in any one of claims 251 to 272, wherein a thickness of the first one of the lateral edge portions decreases in the transversal direction of the endless track.

275. The endless track claimed in any one of claims 251 to 274, wherein the endless body is reinforced.

276. The endless track claimed in any one of claims 251 to 274, comprising a plurality of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track, each inner projection of the plurality of inner projections including part of the flexible polymeric material.

277. The endless track claimed in claim 276, wherein the inner projections are guide projections for guiding the endless track around the track-engaging part of the undercarriage of the vehicle.

278. The endless track claimed in any one of claims 276 and 277, wherein the plurality of inner projections is a first row of inner projections, the endless track comprising a second row of inner projections projecting inwardly from the inner surface and spaced apart in the longitudinal direction of the endless track, the second row of inner projections being spaced apart from the first row of inner projections in the transversal direction of the endless track.

279. The endless track claimed in any one of claims 251 to 278, wherein a second one of the lateral edge portions is bent inwardly relative to the central portion such that a second one of the lateral edge parts of the ground-engaging outer surface is bent inwardly relative to the central part of the ground-engaging outer surface and a second one of the lateral edge parts of the inner surface is bent inwardly relative to the central part of the inner surface.

280. A vehicle equipped with the endless track claimed in any one of claims 251 to 279.

281. The vehicle claimed in claim 280, wherein the vehicle is an all-terrain vehicle (ATV).

282. The vehicle claimed in claim 280, wherein the vehicle is a snowmobile.

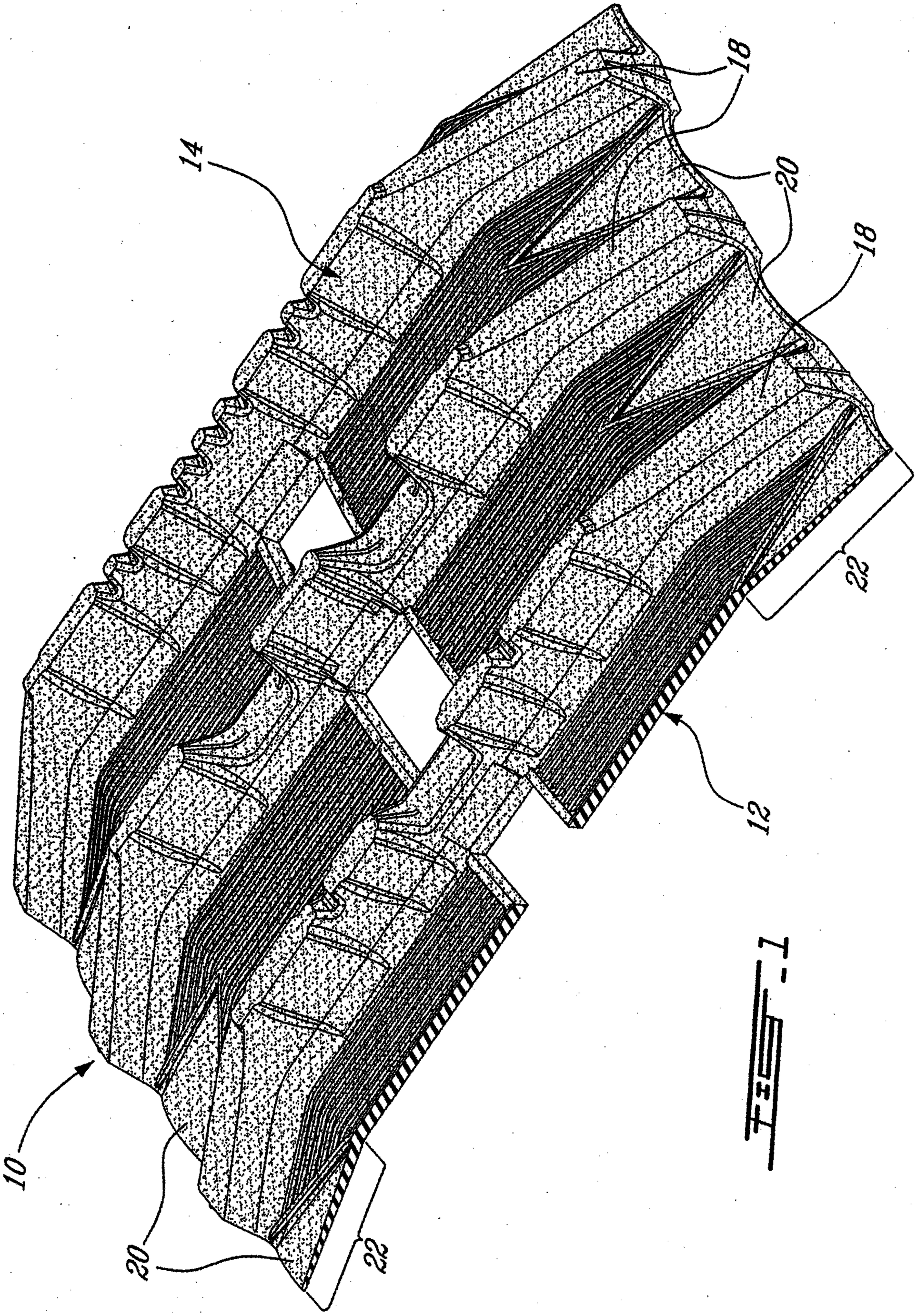


FIG. 1

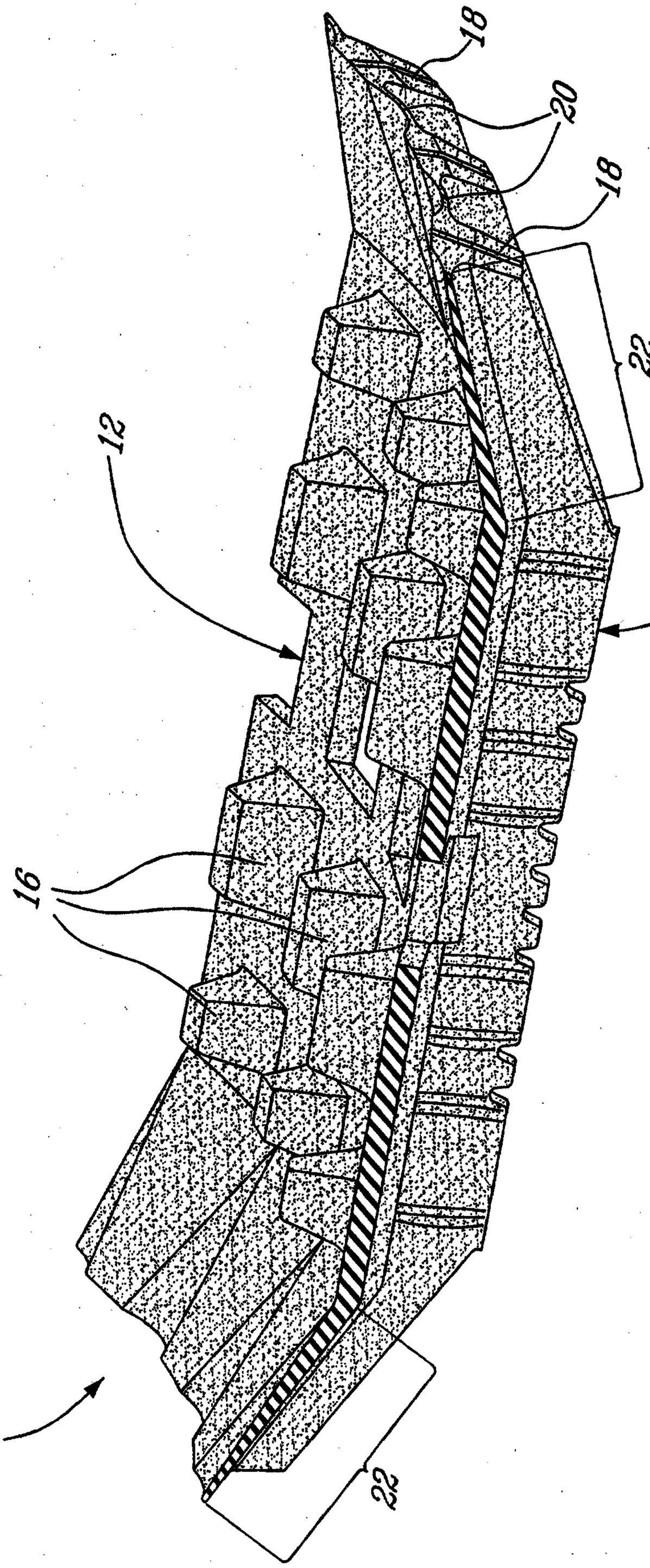
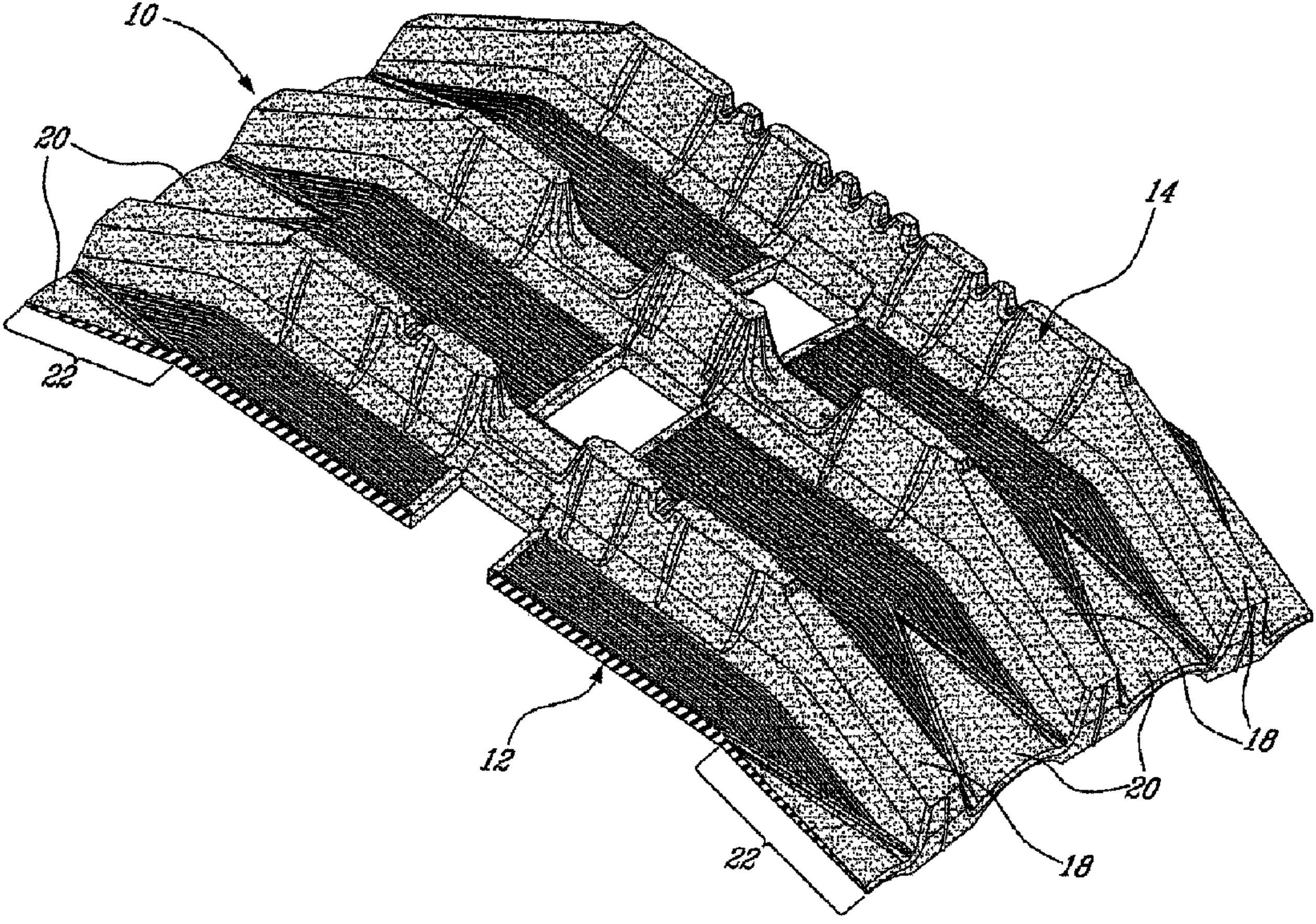


FIG - 1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