state wherein the distal body has a first height and a first width, and a collapsed state wherein the distal body has a second height and a second width, the second height less than the first height, the second width less than the first width; and

a catheter having an interior, a proximal end leading to the interior and a distal end leading to the interior, the catheter comprised of a biocompatible material and configured to envelope the distal body when the distal body is in the collapsed state,

wherein, in the relaxed state, the basket comprises a first pair of distal crowns not attached to another cell of the basket and pointing generally in the distal direction, the first pair of distal crowns located approximately the same distance from the proximal hub and approximately 180 degrees relative to each other (e.g., between about 150 degrees and about 180 degrees relative to each other), and further wherein the basket further comprises a second pair of distal crowns not attached to another cell of the basket and pointing generally in the distal direction, the second pair of distal crowns located distally relative to, and approximately 90 degrees relative to, the first pair of distal crowns (e.g., each distal crown of the second pair of distal crowns is located approximately 60 degrees to 90 degrees relative to a distal crown of the first pair of distal crowns), the distal crowns in the second pair of distal crowns located approximately the same distance from the proximal hub and further wherein each of the distal crowns in the first and second pair of distal crowns comprises an x-ray marker, the x-ray marker more visible under x-ray as compared to the basket strips when the distal body is located in a cranial blood vessel inside the body of a human and the x-ray is taken from outside the human's body. When it is said that the first pair of distal crowns are located approximately the same distance from the proximal hub, it will be understood that if one of the first pair of distal crowns is located X distance from the proximal hub, the other of the first pair of distal crowns is located X distance plus or minus (+/-) 3 mm from the proximal hub, more preferably X distance plus or minus (+/-) 0.5 mm from the proximal hub. Similarly, when it is said that the second pair of distal crowns are located approximately the same distance from the proximal hub, it will be understood that if one of the second pair of distal crowns is located Y distance from the proximal hub, the other of the first pair of distal crowns is located Y distance plus or minus (+/-) 3 mm from the proximal hub, more preferably Y distance plus or minus (+/-) 0.5 mm from the proximal hub. Optionally, instead of a distal hub, the basket includes an open distal end.

[0014] Optionally, the x-ray markers are comprised of a material different than the material forming the basket strips. Optionally, in the relaxed state, the basket interior is substantially hollow. Optionally, in the relaxed state, the distal body does not have another x-ray marker that

CLAIMS

What is claimed is:

1. A system for removing objects from an interior lumen of an animal, the system comprising:

a pull wire having a proximal end and a distal end;

a distal body attached to the pull wire, the distal body comprising an interior, a proximal end, a distal end, a distal body length extending from the proximal end to the distal end, a proximal hub forming the proximal end of the distal body, a plurality of proximal strips, a basket comprised of a plurality of cells formed by a plurality of basket strips, and a distal hub comprising a proximal end, the proximal end of the distal hub forming a distal end of the basket, the basket comprising a basket interior, each proximal strip having a distal end attached to a cell and a proximal end, the proximal ends of the proximal strips converging at the proximal hub, the distal body having a relaxed state wherein the distal body has a first height and a first width, and a collapsed state wherein the distal body has a second height and a second width, the second height less than the first height, the second width less than the first width; and

a catheter having an interior, a proximal end leading to the interior and a distal end leading to the interior, the catheter comprised of a biocompatible material and configured to envelope the distal body when the distal body is in the collapsed state,

wherein, in the relaxed state, the basket comprises a first pair of distal crowns not attached to another cell of the basket and pointing generally in the distal direction, the distal crowns in the first pair of distal crowns located approximately the same distance from the proximal hub and between 150 degrees and 180 degrees relative to each other, and further wherein the basket further comprises a second pair of distal crowns not attached to another cell of the basket and pointing generally in the distal direction, the second pair of distal crowns located distally relative to the first pair of distal crowns, each of the distal crowns in the second pair of distal crowns located between 60 degrees and 90 degrees relative to a distal crown in the first pair of distal crowns, the distal crowns in the second pair of distal crowns located approximately the same distance from the proximal hub and further wherein each of the distal crowns in the first and second pair of distal crowns comprises an x-ray marker, the x-ray marker more visible under x-ray as compared to the basket strips when the distal body is located in a cranial blood vessel inside the body of a human and the x-ray is taken from outside the human's body and further wherein each distal crown in the first and second pair of distal crowns forms part of a cell,

and further wherein at least some of the basket strips are located at the distal end of the basket, wherein each of the basket strips located at the distal end of the basket have a distal end, wherein each of the distal ends of the basket strips located at the distal end of the basket converge at the distal hub and further wherein the distal body, in the relaxed state, comprises a tapered region in which

the distal body height and width decrease as the basket strips located at the distal end of the basket approach the distal hub.

2. The system of claim 1, wherein, the x-ray markers are comprised of a material different than the material forming the basket strips.

3. The system of claim 1, wherein, in the relaxed state, the basket interior is substantially hollow.

4. The system of claim 1, wherein, in the relaxed state, the distal body does not have another x-ray marker that is located approximately the same distance from the proximal hub as the first pair of x-ray markers and the distal body does not have another x-ray marker that is located approximately the same distance from the proximal hub as the second pair of x-ray markers.

5. The system of claim 1, wherein each distal crown in the first and second pair of distal crowns forms part of an enlarged cell and further wherein the surface area of the enlarged cells in the relaxed state is greater than the surface area of the other cells of the basket and further wherein the enlarged cells are configured to allow a thrombus to pass therethrough and into the basket interior.

6. The system of claim 1 wherein, in the relaxed state, the distal body does not have another free distal-pointing crown that is located approximately the same distance from the proximal hub as the first pair of distal crowns and the distal body does not have another free distal-pointing crown that is located approximately the same distance from the proximal hub as the second pair of distal crowns.

7. The system of claim 1 wherein the basket strips are comprised of a memory metal.

8. The system of claim 1, wherein each of the distal crowns in the first pair of distal crowns are configured to contact each other when an exterior, external compressive force is exerted on a distal crown of the first pair of distal crowns when the distal body is in the relaxed state.

9. The system of claim 1 wherein the proximal hub is located approximately in the center of the first height and first width in the relaxed state.

10. The system of claim 1, wherein the proximal end of a first proximal strip is located at least about 65 degrees relative to the distal end of the first proximal strip, wherein the proximal end of a second proximal strip is located at least about 65 degrees relative to the distal end of the second proximal strip, and further wherein the first and second proximal strips intersect adjacent and distal to the proximal hub.

11. The system of claim 1, wherein each distal crown forms part of a cell that further comprises a proximal crown pointing generally in the proximal direction and connected to a memory metal strip.

12. The system of claim 1, wherein the proximal hub is in the form of a proximal tube, wherein the basket, the proximal tube and the proximal strips are comprised of a memory metal, wherein the proximal tube comprises a proximal end and a distal end, and further wherein the proximal strips are integral with the distal end of the proximal tube.

13. The system of claim 1, wherein the pull wire is comprised of a biocompatible metallic material.

14. The system of claim 1, wherein the catheter is comprised of a polymeric material.