

What Is Claimed Is:

1. A tissue composition comprising a plurality of mechanically sliced tissue morsels (TPs) present in a liquid medium, wherein the cellular viability or the tissue or skin cells immediately after morselization is at least about 50%.
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2. The composition of claim 1, wherein the tissue morsels are comprised of naturally interconnected cells and extracellular matrix material.
- 10 3. The composition of claim 1, wherein the tissue or specifically TPs comprise tissue components.
4. The composition of claim 1, wherein at least 75% of tissue or skin cells within the TPs are viable immediately after processing.
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5. The composition of claim 1 wherein at least about 90% of tissue or skin cells within TPs are viable after processing.
6. The composition of claim 1 wherein the TPs, are suspended in aqueous solution.
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7. The composition of claim 1 wherein the TPs are tissue particles formed from harvested tissue harvested selected from the group consisting of Full Thickness Skin Grafts (FTSGs), Split Skin Grafts (SSGs), Cartilage Grafts (CG) and other organ graft tissues.
- 25 8. The composition of claim 1 wherein the TP or FTSGPs have an average size as measured across their largest dimension of about 150 μ to 1500 μ (0.25mm to 1.50 mm).
9. The composition of claim 1, wherein FTSGPs, have an average size as measured across their largest dimension of about 350 μ to 1250 μ (0.35mm to 1.25mm).
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10. The composition of claim 1, wherein the FTSGP have an average size as measured across

their largest dimension of about 250 μ to about 1000 μ , and desirably about 400 μ to about 750 μ .

11. The composition of claim 2, wherein the achieved nominal average size as measured
5 across their largest dimension of tissue morsels may be controllably varied with duration
and/or speed of mechanical processing, as desired for particular surgical implantation
purposes.

12. The composition of claim 1, wherein the FTSGPs are formed by atraumatically
10 slicing the FTSG into particulates in a liquid medium.

13. The composition of claim 12, wherein the liquid medium is a biologic hydrophilic
solution.

14. The composition of claim 12, wherein the liquid medium is an oleophilic medium
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15. The composition of claim 12, wherein the liquid is selected from the group consisting
of a solution, an emulsion, a suspension and combinations thereof.

16. The composition of claim 2, wherein the extracellular matrix material comprises all
20 the components of the dermal extracellular matrix

18. A device for processing organ tissue comprising:
a) a container for accommodating fluid and for receiving said organ tissue;
25 b) a pair of cutting devices supported in juxtaposition in said container, at least
one of said cutting devices being moveable with respect the other said cutting device to cut
organ tissue therebetween; and
c) an agitation device which causes repeated flow of said fluid and organ tissue
through said juxtaposed cutting devices, said agitation device capable of which moving in
30 concert with at least one of said moveable cutting devices and repeatedly moving said fluid
and organ tissue through said juxtaposed cutting devices to cut said organ tissues repeatedly.

19. A device of claim 18, wherein at least one of said movable cutting devices is adjacent to the other cutting device.
20. A device of claim 18, wherein said movable cutting device is mounted to or integrated
5 with said agitation device for movement therewith.
21. A device of claim 18, wherein at least one of said juxtaposed cutting devices is fixed.
22. A device of claim 21, wherein each of said juxtaposed cutting devices include a
10 plurality of spaced apart cutting blades.
23. A device of claim 18 wherein said agitation device causes circulating flow of said fluid and organ tissue through said juxtaposed cutting devices.
- 15 24. A device of claim 18, wherein said agitation device creates a vortex movement of said fluid and said organ tissue repeatedly through the space between said juxtaposed cutting blades.
25. A device of claim 18, wherein said agitation device comprises an impeller for causing
20 circulating flow of said fluid and said organ tissue repeatedly through said juxtaposed cutting blades.
27. A device of claim 18, wherein said agitation device and said movable blade are movable in a rotational direction about an axis.
- 25 28. A device of claim 27, wherein said impeller has a curved surface along said axis for causing continuous circulating movement of said liquid and said organ tissue.
29. A device of claim 18, wherein at least one of said cutting devices includes a plurality
30 said of blades radially arrayed with angular spaces therebetween.
30. A device of claim 28, where the other of said cutting device includes a plurality of said blades radially arrayed with angular spaces therebetween.

31. A device of claim 30, wherein said angular spaces between said blade edges of said movable cutting device are different from said angular spaces of said blades of said juxtaposed cutting device
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32. A device of claim 18, wherein said container includes an opening for receiving of said fluid and said organ tissue.
33. A device of claim 18, wherein the cutting devices are in physical contact along a
- 10 common shear plane.
34. A device of claim 18 wherein said container includes an outlet for discharge of said fluid and said cut organ tissue.
- 15 35. A device of claim 34 further including a dispensing device in fluid communication with said outlet to receive said discharged fluid and said cut organ tissue.
36. A device of claim 35, wherein said dispensing device is a syringe.
- 20 37. A method for forming processed organ tissue into particulate form comprising:
providing a container supporting a pair of cutting devices in juxtaposition;
placing fluid and organ tissue into said container;
moving at least one of said cutting devices to cut said organ tissue; and
providing an agitation device to continuously move said fluid and said organ tissue
- 25 through said cutting devices to repeatedly cut said organ tissue into progressively smaller particulates.
38. The method of claim 37, wherein the agitation device to move said fluid is an impeller.
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39. A method of claim 37, further comprising the step of:
maintaining the other said juxtaposed cutting device in a fixed position.

40. A method of claim 39, further comprising the step of:
mounting to or integrating with said movable cutting device to said impeller for
movement therewith.
- 5 41. A method of claim 40, wherein said movement of said impeller and said cutting
device is rotational movement.
39. A method of claim 37, wherein said container includes an outlet and further comprises
the step of:
10 discharging said fluid and said cut organ tissue through said outlet.
42. A method of claim 39 further including:
providing a dispensing device in fluid communication with said outlet; and
discharging said fluid and said cut organ tissue into said dispensing device.
- 15 43. A plurality of full thickness skin graft particulates (FTSGPs) made by the process
comprising:
providing a container supporting a pair of cutting devices in juxtaposition;
placing fluid and FTSG tissue into said container;
20 moving at least one of said cutting devices to cut said FTSG tissue; and
providing an agitation device to continuously move said fluid and said organ tissue
through said cutting devices to repeatedly cut said organ tissue into progressively smaller
FTSGPs.
- 25 44. The product of claim 43 in aqueous suspension.
45. The product of claim 43, wherein the majority of the plurality of TPs are viable during
and immediately after processing.
- 30 46. The product of claim 43, wherein the FTSGPs have an average size as measured
across their largest dimension of about 500 μ to about 1000 μ .

47. The product of claim 46, wherein FTSGPs are formed by atraumatically slicing in a fluid medium.
48. The product of claim 47, wherein the liquid medium is a hydrophilic medium.
- 5 49. The product of 45, wherein the liquid medium is an oleophilic medium.
50. A device of claim 33 where said movable cutting device includes blade edges.
- 10 51. A device of claim 50 where said blade edges of said movable cutting device are double beveled edges.
52. A device of claim 50 wherein said blade edges of said movable cutting device have a planar extent designed to be substantially co-planar with said other cutting device at a
- 15 common shear plane.