Claims:

1. An apparatus for applying a cleaning material, the apparatus comprising:

a roll of cleaning material attached to a moving cleaner device that places a portion of the cleaning material against a portion of a continuously moving flexible electronics web surface to clean debris from that portion of the moving flexible electronics web surface using the portion of the cleaning material; and

wherein the continuously moving flexible electronics web surface has a plurality of portions and each portion moves over a cleaning point over time and the cleaning material roll has a plurality of portions and each portion of the cleaning material is adjacent the cleaning point over time and the cleaning material moves at a same speed and direction as the moving flexible electronics web surface so that the continuous moving flexible electronics web surface is cleaned.

2. The apparatus of claim 1, wherein the moving cleaner device further comprises a source cylinder and a take-up cylinder wherein the cleaning material is rolled off of the source cylinder and rolled onto the take-up cylinder after the cleaning material has cleaned the moving flexible electronics web surface and each of the source cylinder and the take-up cylinder have a motor that drives a motion of the cleaning material past the cleaning point and the cleaning material has a width equal to a width of the moving flexible electronics web surface and wherein the source cylinder further comprises a sensor that determines an amount of cleaning material remaining on the source cylinder and wherein the moving cleaner device further comprises a roller that generates a contact patch between the cleaning material and the moving flexible electronics web surface at the cleaning point.

3. The apparatus of claim 1 further comprising a second roller underneath the continuously moving flexible electronics web surface that presses the portion of the continuously moving flexible electronics web surface at the cleaning point against the portion of the cleaning material or wherein the moving cleaner device further comprises a bracket connected to the roller, the source cylinder and the take-up cylinder that reverses a direction of the cleaning material wherein the cleaning material rolls off the take-up cylinder and is taken up by the source cylinder so that the cleaning material is reused and wherein the bracket rotates 180 degrees to

reverse the direction of the cleaning material and wherein the moving cleaner device further comprises an integrated control system that controls the operation of the two cylinders, the sensor and the bracket.

4. The apparatus of claim 1, wherein the cleaning material further comprises a cleaning layer being one of a polyimide layer and a silicone containing polymer layer that has a Durometer Shore of between about 40 and about 100 and surface energy of 15 to 40 dynes/cm2 and the cleaning layer has a thickness of between 20 and 300 microns and wherein the cleaning material further comprises a web layer underneath the cleaning layer with a thickness of between 20 and 300 microns.

5. A method for cleaning a continuously moving flexible electronics web surface, comprising:

moving, at a same speed and same direction as the continuously moving flexible electronics web surface, a cleaning material layer;

contacting, at a cleaning point, a portion of the moving cleaning material with a portion of the continuously moving flexible electronics web surface; and

removing debris from the portion of the continuously moving flexible electronics web surface when the portion of the moving cleaning material contacts the portions of the continuously moving flexible electronics web surface.

6. The method of claim 5, wherein moving the cleaning material further comprises unrolling the cleaning material from a source cylinder and rolling the cleaning material, after the cleaning material has contacted the continuously moving flexible electronics web surface, onto a take-up cylinder by driving the source cylinder and take-up cylinder and determining, by a sensor at the source cylinder, an amount of cleaning material remaining on the source cylinder and wherein contacting the cleaning material to the continuously moving flexible electronics web surface at the cleaning point further comprises generating, by a roller, contact between the cleaning material and the continuously moving flexible electronics web surface at the cleaning point.

7. The method of claim 6, wherein contacting the cleaning material to the continuously moving flexible electronics web surface at the cleaning point further comprises

pressing, by a roller underneath the continuously moving flexible electronics web surface, the portion of the continuously moving flexible electronics web surface at the cleaning point against the portion of the cleaning material or wherein moving the cleaning material further comprises moving the roller, the source cylinder and the take-up cylinder to reverse a direction of motion of the cleaning material wherein the cleaning material rolls off the take-up cylinder is taken up by the source cylinder so that that the cleaning material is reused or wherein moving the roller, the source cylinder and the take-up cylinder further comprising rotating the roller, the source cylinder and the take-up cylinder 180 degrees to reverse the direction of the cleaning material.

8. The apparatus of claim 1 further comprising:

a roll of second cleaning material attached to a second moving device that places a portion of the second cleaning material against a portion of the cleaning material to clean debris from that portion of the cleaning material using the portion of the cleaning material; and

wherein the second cleaning material has a plurality of portions and each portion moves over a cleaning point over time and the cleaning material has a plurality of portions and each portion is adjacent the cleaning point over time and the second cleaning material moves at a same speed and direction as the cleaning material so that the cleaning material is cleaned.

9. The apparatus of claim 8, wherein the second moving device further comprises a second source cylinder and a second take-up cylinder each having a motor wherein the second cleaning material is rolled off of the second source cylinder and rolled onto the second take-up cylinder after the second cleaning material has cleaned the cleaning material and wherein the second source cylinder further comprises a second sensor that determines an amount of second cleaning material remaining on the second source cylinder and wherein the moving device further comprises a second roller that generates a contact patch between the cleaning material and the continuously moving cleaning material at the cleaning point.

10. The apparatus of claim 9, wherein the second moving device further comprises a second bracket that rotates 180 degrees connected to the second roller, the second source cylinder and the second take-up cylinder that reverses a direction of the second cleaning material wherein the second cleaning material rolls off the second take-up cylinder is taken up by the second source cylinder so that that the second cleaning material is reused and wherein the cleaning

device further comprises an integrated control system that controls the operation of the two second cylinders, the second sensor and the second bracket.

11. The method of claim 5 further comprising:

moving, at a same speed as the cleaning material, a second cleaning material layer;

contacting, at a cleaning point, a portion of the moving second cleaning material with a portion of the cleaning material; and

removing debris from the portion of the cleaning material when the portion of the second moving cleaning material contacts the portions of the cleaning material.

12. The method of claim 11, wherein moving the second cleaning material further comprises unrolling the second cleaning material from a second driven source cylinder and rolling the second cleaning material, after the second cleaning material has contacted the cleaning material, onto a second driven take-up cylinder and further comprising determining, by a second sensor at the second source cylinder, an amount of second cleaning material remaining on the second source cylinder and wherein contacting the second cleaning material to the cleaning material at the cleaning point further comprises generating, by a second roller, contact between the second cleaning material and the cleaning material at the cleaning point.

13. The method of claim 12, wherein moving the second cleaning material further comprises moving the second roller, the second source cylinder and the second take-up cylinder by rotating the second roller, second source cylinder and second take-up cylinder 180 degrees to reverse a direction of motion of the second cleaning material wherein the second cleaning material rolls off the second take-up cylinder is taken up by the second source cylinder so that that the second cleaning material is reused.

14. A cleaning material for removing small particles from a flexible electronics roll without leaving residues, the cleaning material comprising:

a cleaning layer;

a web film formed underneath the cleaning layer that supports the cleaning layer; and

wherein the cleaning layer and web film are rolled up to form the cleaning material roll.

15. The cleaning material of claim 14, wherein the cleaning layer further comprising one of a polyimide layer and a polymer layer.

16. The cleaning material of claim 15, wherein the polymer layer has a Durometer Shore of between about 40 and about 100 and surface energy of 15 to 40 dynes/cm2.

17. The cleaning material of claim 15, wherein the polymer layer is a silicon containing polymer layer.

18. The cleaning material of claim 14, wherein the cleaning layer has a thickness of between 20 and 300 microns.

19. The cleaning material of claim 14 further comprising a release layer formed on top of the cleaning layer.

20. The cleaning material of claim 18, wherein the web film has a thickness of between 20 and 300 microns.

21. The cleaning material of claim 20, wherein the web film is one of polyester, polyethylene and polyimide.