CLAIMS

What is claimed is:

1. A razor blade apparatus characterized by a sharpened substrate having at least one layer of BAM material disposed thereon.
2. The razor blade apparatus of claim 1 wherein said at least one layer of BAM material is directly disposed on the sharpened substrate.
3. The razor blade apparatus of claim 1 wherein one or more interlayers are disposed between the BAM layer and the sharpened substrate or wherein one or more overcoat layers are disposed on top of the BAM layer.
4. The razor blade apparatus of claim 3 wherein said one or more interlayers and said one or more overcoat layers comprise an adhesion layer.
5. The razor blade apparatus of claim 4 wherein said adhesion layer is comprised of niobium, chromium, platinum, titanium, or any combination or alloys thereof.
6. The razor blade apparatus of claim 3 wherein at least one polymeric material is disposed on top of the at least one BAM layer, on top of said one or more interlayer, or on top of said one or more overcoat layer, or any combination thereof.
7. The razor blade apparatus of claim 6 wherein said at least one polymeric material comprises PTFE.
8. The razor blade apparatus of claim 6 wherein said at least one polymeric material comprises a material with a coefficient of friction greater or lesser than that of PTFE.
9. The razor blade apparatus of claim 3 wherein said one or more overcoat layers is comprised of a composite of BAM and a second component.
10. The razor blade apparatus of claim 9 wherein said second component is a polymeric material.
11. The razor blade apparatus of claim 9 wherein said one or more overcoat layers comprises an increasing concentration of said second component in a direction towards an outer surface of the substrate or a decreasing concentration of said second component in a direction towards an outer surface of the substrate.
12. The razor blade apparatus of claim 1 wherein the at least one BAM layer is disposed on the sharpened substrate via physical vapor deposition, chemical vapor deposition, magnetron sputtering, or any combination thereof.
13. The razor blade apparatus of claim 1 wherein the sharpened substrate is comprised of stainless steel, metal, ceramic, composite, plastic, glass, or any combination thereof.

14. The razor blade apparatus of claim 1 wherein the sharpened substrate is on a blade edge of the razor blade wherein said blade edge is linear, non-linear, or any combination thereof.

15. A shaver apparatus comprising

a component having at least one layer of BAM material disposed thereon,

wherein said component is a non-cutting element or a cutting element and wherein said non-cutting element is a cartridge or handle component, a clip disposed in a wet shaver or an outer or inner surface of a foil disposed in an electric dry shaver and wherein said cutting element is a cutter element in an electric dry shaver or a razor blade edge in a wet shaver.

CLAIMS

What is claimed is:

1. A razor blade apparatus characterized by a sharpened substrate having at least one layer of BAM material disposed thereon, wherein one or more overcoat layers comprised of a composite of BAM and a second component is disposed on top of the layer of BAM material.

2. The razor blade apparatus of claim 1 wherein said at least one layer of BAM material is directly disposed on the sharpened substrate.

3. The razor blade apparatus of claim 1 wherein one or more interlayers are disposed between the layer of BAM material and the sharpened substrate.

4. The razor blade apparatus of claim 3 wherein said one or more interlayers and said one or more overcoat layers comprise an adhesion layer.

5. The razor blade apparatus of claim 4 wherein said adhesion layer is comprised of niobium, chromium, platinum, titanium, or any combination or alloys thereof.

6. The razor blade apparatus of claim 3 wherein at least one polymeric material is disposed on top of the at least one layer of BAM material, on top of said one or more interlayer, or on top of said one or more overcoat layer, or any combination thereof.

7. The razor blade apparatus of claim 6 wherein said at least one polymeric material comprises PTFE.

8. The razor blade apparatus of claim 6 wherein said at least one polymeric material comprises a material with a coefficient of friction greater or lesser than that of PTFE.

9. The razor blade apparatus of claim 1 wherein said second component is a polymeric material.

10. The razor blade apparatus of claim 1 wherein said one or more overcoat layers comprises an increasing concentration of said second component in a direction

towards an outer surface of the substrate or a decreasing concentration of said second component in a direction towards an outer surface of the substrate.

11. The razor blade apparatus of claim 1 wherein the at least one layer of BAM material is disposed on the sharpened substrate via physical vapor deposition, chemical vapor deposition, magnetron sputtering, or any combination thereof.

12. The razor blade apparatus of claim 1 wherein the sharpened substrate is comprised of stainless steel, metal, ceramic, composite, plastic, glass, or any combination thereof.

13. The razor blade apparatus of claim 1 wherein the sharpened substrate is on a blade edge of the razor blade wherein said blade edge is linear, non-linear, or any combination thereof.