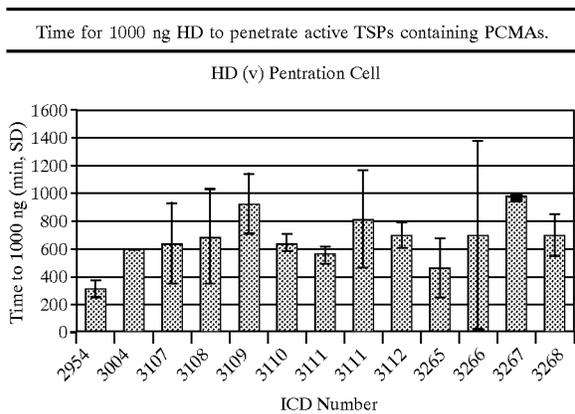
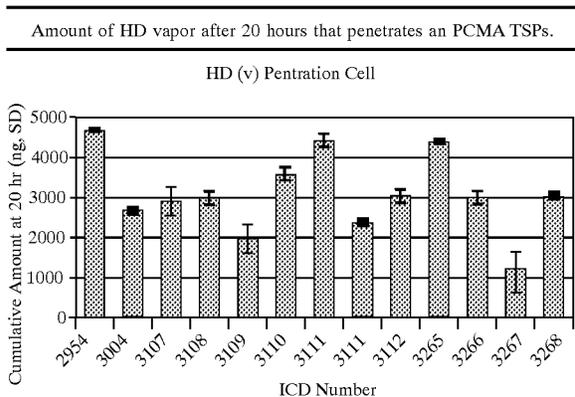


CHART 1



A comparison of the cumulative amount of HD vapor that penetrates the active TSP over 20 hours also shows the increase in protection.

CHART 2



In fact, as few as 1200 ng of HD vapor penetrated through the active TSP over 20 hours with active TSP ICD 3267 ([ZrNi_{0.95}Mn_{0.05}][2-(dimethylamino)ethylmethacrylate]), M=mischmetal-mixture lanthanides, primarily Ce, La, Nd, and Pr.)

Having now fully described the invention, it will be apparent to one of ordinary skill in the art that many changes and modifications can be made thereto without departing from the spirit or scope of the invention as set forth herein.

What is claimed is:

1. A topical skin protectant formulation for neutralizing chemical warfare agents into less toxic products comprising: a barrier base cream; and one or more organic polymer coated metal alloy as an active moiety.

2. The topical skin protectant formulation of claim 1, wherein the base cream comprises poly(tetrafluoroethylene) resins dispersed in perfluorinated polyether oils.

3. The topical skin protectant formulation of claim 1, wherein said one or more of said organic polymer coated metal alloys is selected from the group consisting of:

- a. mischmetal mixture of Ce, La, Nd, and Pr lanthanides;
- b. Mg₂NiH₂+propylene glycol butyl ether;
- c. TiFeMn (fine);
- d. CaNi₅H₃ power;
- e. CaNi₅H₃+perfluoropropene reaction product coating;
- f. slightly hydrided Mg₂Ni powder;

- g. TiFeMn(fine) with methylmethacrylate;
- h. CaNi₅H₃ powder;
- i. (TiFe_{0.9}Mn_{0.1}+methyl methacrylate);
- j. (ZrNi_{0.95}Mn_{0.05}+methyl methacrylate);
- k. (ZrNi_{0.95}Mn_{0.05})+2(dimethylamino)ethyl methacrylate);
- l. (TiFe_{0.9})Mn_{0.1}+Styrene; and Ti/Mn alloy.

4. A topical skin protectant formulation for neutralizing chemical warfare agents into less toxic products comprising:

a. a barrier base cream, said barrier base cream comprising poly(tetrafluoroethylene) resins dispersed in perfluorinated polyether oils; and

b. one or more active moieties comprising one or more organic polymer coated metal alloy selected from the group consisting of:

- i. mischmetal mixture of Ce, La, Nd, and Pr lanthanides;
- ii. Mg₂NiH₂+propylene glycol butyl ether;
- iii. TiFeMn (fine);
- iv. CaNi₅H₃ power;
- v. CaNi₅H₃+perfluoropropene reaction product coating;
- vi. slightly hydrided Mg₂Ni powder;
- vii. TiFeMn(fine) with methylmethacrylate;
- viii. CaNi₅H₃ powder;
- ix. (TiFe_{0.9}Mn_{0.1}+methyl methacrylate);
- x. (ZrNi_{0.95}Mn_{0.05}+methyl methacrylate);
- xi. (ZrNi_{0.95}Mn_{0.05})+2(dimethylamino)ethyl methacrylate);
- xii. (TiFe_{0.9})Mn_{0.1}+Styrene; and
- xiii. Ti/Mn alloy.

5. The topical skin protectant formulation of claim 4, further comprising one or more additives.

6. The topical skin protectant formulation of claim 5, wherein said additives comprise one or more of water, surfactant, stabilizers, camouflage paints, and sunscreens.

7. A topical skin protectant formulation for neutralizing chemical warfare agents into less toxic products comprising:

a. a barrier base cream, said barrier base cream comprising poly(tetrafluoroethylene) resins dispersed in perfluorinated polyether oils;

b. coated metal alloy selected from the group consisting of:

- i. mischmetal mixture of Ce, La, Nd, and Pr lanthanides;
- ii. Mg₂NiH₂+propylene glycol butyl ether;
- iii. TiFeMn (fine);
- iv. CaNi₅H₃ power;
- v. CaNi₅H₃+perfluoropropene reaction product coating;
- vi. slightly hydrided Mg₂Ni powder;
- vii. TiFeMn(fine) with methylmethacrylate;
- viii. CaNi₅H₃ powder;
- ix. (TiFe_{0.9}Mn_{0.1}+methyl methacrylate);
- x. (ZrNi_{0.95}Mn_{0.05}+methyl methacrylate);
- xi. (ZrNi_{0.95}Mn_{0.05})+2(dimethylamino)ethyl methacrylate);
- xii. (TiFe_{0.9})Mn_{0.1}+Styrene; and
- xiii. Ti/Mn alloy; and

c. one or more additives.

8. The topical skin protectant formulation of claim 7, wherein said additives comprise one or more of water, surfactant, stabilizers, camouflage paints, and sunscreens.

9. A topical skin protectant system comprising:

a. a topical skin protectant formulation for neutralizing chemical warfare agents into less toxic products comprising a barrier cream and one or more active moieties,