**Particulate and Film Polymeric Dihydropyridazines as Sunscreens With Inherent Antioxidant Properties**

**UA ID** Technology #ua17-216

**Title:** Particulate and Film Polymeric Dihydropyridazines as Sunscreens with Inherent Antioxidant Properties

**Invention:** This invention is a polymeric sunscreen that can be applied either as a film or as particles to be suspended in either water or oil.

**Background:** Both UVB and UVA wavelengths penetrate the atmosphere, inducing skin cancers, eye damage and aging if not properly protected or treated. Common commercial sunscreens can block around 93% of UVB and UVA rays, depending on brand. Through the utilization of alkenes, this invention improves upon common commercial sunscreens by absorbing up to 400nm of UV rays.

**Applications:**
- Sunscreen
- Thin film coating on surfaces

**Advantages:**
- Protects skin and hair from UV rays
- Protects paints, plastics, woods or other UV sensitive surfaces
- Antioxidant characteristics extend lifetime of material
- Fluorescence can be used to determine if screen is functioning

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