

## **HONORABLE MENTION TECHNOLOGY**

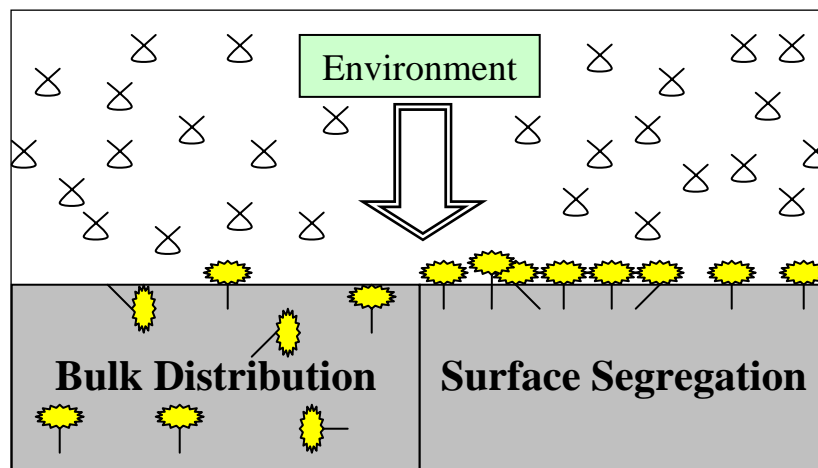
### **Nano-Engineered Additives for Active Coatings**

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This novel patent for coating systems spontaneously segregates additives to the surface of the coating by means of macromolecular transports (MTs). By directing the additives to the surface of the coating, it reduces the amount of additives needed for desired surface properties, such as anti-microbial activity and minimizes negative effects on the base coating. The MTs are compatible with a wide range of military and commercial coating chemistries, coated fabrics and textiles and also enhances the surface concentration by ~10-fold.

Features include:

- Demonstrated, repeatable ~10-fold self-segregation of active components to the air/polymer interface in coatings
- Compatible with existing coating systems
- Demonstrated in commercial paints
- Demonstrated activity toward environmental hazards
- MTs have the ability to transport a plethora of additives to the air/polymer surface of a coating



Potential markets and applications include:

- Anti-fouling coatings for marine applications
- Coatings for wood treatments
- Pool coatings
- Hospital paints/coatings – antimicrobial to help prevent nosocomial infections
- Potential use in coated fabrics
- Myriad of other potential markets