



## **Esterification of carboxylate containing polymers**

**Description of Technology:** This invention concerns a process for forming alkyl esters in polymers, comprising, maintaining a polymer containing carboxylate ions, whose counterions are esterifying ammonium or sulfoxonium ions at a temperature of about 0.degree. C. to about 200.degree. C. It has been found that when the counterion (positive ion) of the carboxylate anion is an ammonium or sulfoxonium cation the salt of the cation is relatively stable in water, but efficiently esterifies the carboxylate group under relatively mild conditions in the substantial absence of water.

### **Patent Listing:**

1. **US Patent No. 5,463,182**, Issued October 31, 1995, "Esterification of carboxylate containing polymers"

<http://patft.uspto.gov/netacgi/nph-Parser?Sect2=PTO1&Sect2=HITOFF&p=1&u=%2Fnetacgi%2FPTO%2Fsearch-bool.html&r=1&f=G&l=50&d=PALL&RefSrch=yes&Query=PN%2F5463182>

**Market Potential:** The overall reaction which takes place during the process can be represented by the equation where R.sup.a is alkyl or substituted alkyl, Z is a neutral compound which contains all of the ammonium or sulfoxonium ion except the group R.sup.a, and the starting carboxylate ion and final ester are bonded to a polymer.

### **Benefits:**

- **Stabilize mixtures involving polymers used for coatings, adhesives, photo and thermal resists**

### **Applications:**

- **Esterifying carboxylate containing polymer**

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