



## Highly Active Catalyst for Atom Transfer Radical Polymerization

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**Patent Status:**

Patent Issued

### Description of Technology

This technology consists of a class of catalysts with unusually high activity for polymerizing monomers, including specifically methyl acrylate, methyl methacrylate and styrene. The class of catalysts is characterized by complexes of metal halides with a nitrogen-containing ligand.

### Applications

An object of this technology is to provide a catalyst for living radical polymerization or atom transfer radical polymerization (ATRP) of monomers consisting of a metal halide and nitrogen-containing ligand having an unusually high activity such that unusually low concentrations of the catalyst relative to the initiator are required.

### Features & Benefits

The Highly Active Catalyst has enhanced activity and smaller concentrations which allow it to remain in the product with very small economic impact and negligible impact on product quality.

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