FIRST PRINCIPALS
Technology Transfer & Commercialization

BIGUANIDE POLYMERS

Biguanide compounds are known to exhibit germicidal and antimicrobial activities. With certain types of substituents, the compositions are also useful as components of hair-care products and other items of personal hygiene.

This opportunity provides the range of formulations suitable for a number of applications.

THE OPPORTUNITY

These formulations present a tremendous range of product applications such as:

- Chlorine-alternative pool water disinfectants
- Biocidal bandages and wound dressings
- Hair-care products
- Superabsorbent gels for baby diapers & personal hygiene products
- Ink-jet printing inks
- Contact lens care solutions
- Biofilms

PATENTED TECHNOLOGY

Current U.S. patents granted that protect the technology include:

US Patents

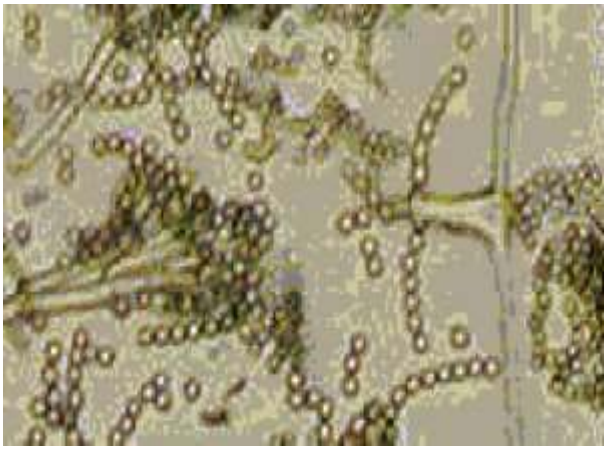
5,665,843*: Allylbiguanide polymer and method of producing it.*

5,260,385: *Biguanide group-containing polyallylamine and method of producing it.*

Features

- Good resistance to heat and hydrolysis.
- Preferably polymerized with azo initiator in low pH.
- Preparation under wide range of temperatures, reaction times, and solvents.
- Broad claims protect many variations in the biguanide groups and their substituents.

The polymer may be prepared by reacting polyallylamine with a guanyl-O-alkylisourea compound to convert a portion of the amino groups of the polyallyamine to biguanido groups.



INTELLECTUAL CAPITAL

This technology was developed at AIST, Japan's premier, public research organization.

With research facilities and more than 3,200 employees across Japan, AIST is an organization that comprises 15 research institutes previously under the former Agency of Industrial Science and Technology in the Ministry of International Trade and Industry and the Weights and Measures Training Institute.

FOR MORE INFORMATION

AIST is seeking to license these technologies and assist with their commercialization. A number of investment options are currently under consideration.

Consideration will be provided to a range of financial, strategic, and commercial investment partnerships.

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