

Process for making inorganic gels

Description of Technology: This invention relates to a rapid, nonaqueous process for producing optically clear, inorganic gels of silicon, titanium and zirconium.

Patent Listing:

1. **US Patent No. 5,441,718**, Issued on August 15, 1995, "Process for making inorganic gels."

<http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HTTOFF&p=1&u=%2Fnetahml%2FPTO%2Fsearch-bool.html&r=1&f=G&l=50&co1=AND&d=PTXT&s1=5,441,718.PN.&OS=PN/5,441,718&RS=PN/5,441,718>

2. **US Patent No. 5,558,849**, Issued on September 24, 1996, "Process for making inorganic gels."

<http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HTTOFF&p=1&u=%2Fnetahml%2Fsearch-adv.htm&r=5&f=G&l=50&d=PALL&S1=5441718.URUF.&OS=ref/5441718&RS=REF/5441718>

Market Potential: The above-described inorganic gels can be dried to form strong, hard, optically clear compositions that are useful as abrasion-resistant and controlled refractive index coatings in optical applications such as, for example, lenses and windows. They may be used as dielectric coatings and anti-corrosive coatings. Additionally, the gels have a pore structure of extremely small size, high specific surface area and narrow pore size distribution which makes them useful for catalyst or enzyme support, gas separation and in chromatography as column packing.

Benefits:

- Can be dried to form strong, hard, optically clear compositions.
- Have a pore structure of extremely small size
- High specific surface area.
- Narrow pore size distribution
-

Applications:

- Lenses (optical)
- Windows
- Gas separation
- Chromatography

Contact:

Delaware Economic Development Office
Direct: (302) 577-8477, Fax: (302) 577-8499