Tucker Ellis LLP

NANOTECHNOLOGY LITIGATION

OVERVIEW

At its simplest, nanotechnology is the manipulation, control, and integration of atoms and molecules to form materials, structures, and devices at nanoscale. At nanoscale, different laws of physics apply, and material properties change – causing the molecules to behave in new ways. Two main types of nanotechnology are currently being researched and developed: nanoscale materials technology and molecular manufacturing. Nanoscale materials technology refers to the creation of small structures between one and one hundred nanometers in size, while molecular manufacturing is the building of chemical manufacturing systems that join molecules together under the control of computers. Although numerous commercial applications of nanoscale materials technology are used in today's marketplace – including tools, drug delivery, solar energy, high resolution displays, coatings, sensors, medical imaging, cosmetics, glues, lubricants, fuels, textiles, and computer memory – molecular manufacturing is still a strictly theoretical area of exploration; however, the potential applications for both are limitless.

Calls for tighter regulation of nanotechnology have occurred alongside the debate related to the potential human health and safety risks. Disagreement over the definition of "nanotechnology," the diversity of use of nanomaterials, and the general lack of information regarding what nanomaterials are being produced and by whom, make uniform regulation of nanomaterials extremely challenging. Whether nanotechnology products merit special government regulation – and whether it is necessary and appropriate to assess new substances before their release into the market – is the subject of ongoing discussion among consumer advocacy groups. Recently, regulatory bodies have begun taking tentative steps toward addressing these concerns.

Of primary concern to nanotechnology-related litigation is the implication that carbon nanotubes share similar traits with asbestos fibers – a good indication that litigation in the areas of product liability and occupational exposure are imminent. Using the history of asbestos litigation to forecast potential suits alleging harm from nanotechnology and other emerging technologies, it is important to note that nanotechnology litigation will only mirror asbestos litigation if a signature disease is identified. But there is no such disease for nanotechnology or any solid indication that nanotechnology poses any threat to humans. Additionally, the U.S. Food & Drug Administration (FDA) has taken the position that while it will keep abreast of any scientific literature regarding the dangers of nanotechnology, it will regulate nanotechnology based not on perceived risk of harm but on known hazard. However, should plaintiffs begin pursuing harm from nanotechnology as a viable and triable issue before regulation or disease identification, the issues become (1) what possible cause of action they will use to bring such a claim, and (2) how they will overcome the requirement that they be harmed or damaged in some way. While a claim could be brought alleging that a nanotechnology product was "misbranded," the more likely avenues for such litigation would be failure to warn or consumer fraud.

In June 2011, the FDA issued an Advance Notice of Proposed Rulemaking (ANPRM) inviting comment on a proposed mandatory warning to advise consumers to avoid breathing sunscreen spray. While the FDA shied away from any specific reference to the zinc and titanium dioxide nanoparticles frequently found in spray sunscreens, its request for information about "the typical particle size distributions for sunscreen spray products" suggests that these materials were likely the impetus for the proposed warning. Because inadequate instructions and warnings are frequent grounds for product liability claims, the FDA warning may result in the emergence of the first nanotechnology litigation: failure-to-warn and medical monitoring nanotort actions related to the use of nanotechnology in spray sunscreens.

HOW TUCKER ELLIS CAN HELP

In addition to manufacturers of spray sunscreens, manufacturers and distributors of other products using other nanoscale materials are also possible targets in this litigation. The Tucker Ellis Mass Tort & Product Liability Group can assist clients with legal issues and help develop strategies to manage risks.

The Tucker Ellis Mass Tort & Product Liability Group represents product manufacturers in tens of thousands of cases filed in state and federal courts nationwide at both the trial and appellate levels. Our lawyers focus on the national, regional, and local defense of product liability cases involving industrial, commercial, and consumer products and toxic tort cases related to alleged exposure to naturally occurring substances such asbestos, silica, coal mine dust, and talc, as well as welding fume, mold, and other claimed toxins.