SARS: Killer Infectious Disease or High Potency Commercial Market?

Much attention has been paid in recent months to the spread of SARS, or Severe Acute Respiratory Syndrome. The World Health Organization has designated China, Hong Kong, and Toronto, Canada to be the most critical areas of infection. After these announcements and other proclamations warning travelers away from countries that are heavily afflicted with SARS, commerce and tourism in the respective areas have plummeted with estimated losses in the tens of millions of dollars per day. Amidst these staggering financial losses is a substantial dollar figure associated with the mystery disease that is dragging down the already-struggling Asian economy. Oddly enough, however, recent events in the world of biological engineering and pharmaceuticals seem to indicate a commercial future for the rapidly growing SARS market. Nearly every company and research group associated with the discovery and investigation of SARS has begun the process to receive patents for their respect discoveries. Such patents are hotly debated and potentially carry amazing profit potential for the involved organizations.

Canadian scientists, who discovered the genetic makeup of the coronavirus that drives the infectious disease, are applying for a US patent that gives legal claim to the genetic makeup of the virus. Hong Kong scientists have applied for patents on the virus itself, not merely the genetic makeup. In competition with these two filings is the US Center for Disease Control, which has filed a similar patent regarding all of its own research into the SARS virus. These competing groups of scientists have made the first motions into the emerging market of SARS related developments. In the event that SARS does not simply fade out of existence at the end of the current epidemic, a very fertile future market for SARS medicine and other treatments will bolster the pharmaceutical industry in the same manner that the Flu virus creates an enormous market for vaccines, over-the-counter drugs, and diagnostic methods and tools. Several leading corporations in the drug industry have made public their intentions on developing all of these markets for the SARS virus to support the worldwide effort to control the virus.

Merck & Co. and Aventis SA, pharmaceutical industry heavy hitters, have each made clear their intentions to develop a readily available vaccine for SARS using the genetic makeup that was decoded by Canadian scientists in recent weeks. These companies are two of many US-based corporations that have entered the SARS patent competition. Many companies have filed intellectual property patents for potential or possible treatments or methods. Such patents are widely known to be crapshoots for companies and consequently are filed in a "quantity over quality" manner. The possibilities for economic gain from such patents are low; however, on the off chance that a patent does pay off, it is an extremely profitable document. A patent on the method of treatment that will cure SARS is priceless at this point and could be worth hundreds of millions of dollars in exclusive sales to hospitals, cities, and health organizations around the globe.

This week, the Wall Street Journal published a quote from Jonas Salk, who pioneered the first vaccination of polio in the early 1950's, saying of a possible patent for his vaccine, "There is no patent. Could you patent the sun?" Such thoughts of collective property in matters of health and wellness have faded as the competitive commercial worlds of pharmaceutical drugs and genetic research have taken over the vaccination and inoculation industry. One of the most interesting portions of the SARS epidemic has been the nature of the above-mentioned patent filings. Many of the companies and scientists involved have made clear statements that relay a sense of urgency in making patent filings that is created by the possible economic opportunity that SARS related developments offer. The contrast that results when one compares the statement of Salk with the hundreds of patents related to SARS is a startling reminder of the commercial direction that basic science is moving.