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DOMESTIC PATENT LAW AND SPACE ACTIVITIES: ISSUES OF ENFORCEABILITY

**Abstract**

As technological developments make it increasingly possible to conduct activities in areas once regarded as inaccessible, including outer space, the boundaries, scope and application of national patent law become uncertain. This issue has received widespread attention recently because Blue Origin, LLC holds a U.S. patent on the launching and landing of reusable boosters on a sea-going platform. Its competitor in the launch business, Space Exploration Technologies, Inc. (“SpaceX”) has stated publicly that it will attempt to land one of its Falcon 9 rockets on such a platform during one of its upcoming missions.

Using the Blue Origin-SpaceX rivalry as a starting point, this paper will look at the use of patents in the space launch industry and will also analyze some of the legal issues related to the enforcement of patent rights with respect to rocket launches. Empirically, it will examine which aerospace companies resort to patent protection, in which countries they file, and why they rely on patents rather than trade secrets. It will also look at the theoretical question of whether a patent awarded by an individual country may be enforced with respect to a rocket travelling through the airspace above international waters, in outer space, or on the high seas. More specifically, can domestic patent law be infringed where steps of the patented method are practiced outside the jurisdiction of the patent, for example, when landing on a sea-going platform located in the Exclusive Economic Zone, the continental shelf or the high seas? For rockets that are intended to be launched into space, what role does Article VIII of the Outer Space Treaty (“OST”) play in determining where and how to apply the law of the State of registration, especially prior to and after a return from orbit? What about suborbital rockets that are never intended to reach outer space? And what if a space object is not registered with any State party to the OST or is registered with a State party different from the one in which the patent has been granted?

This paper will provide a practical analysis of the enforceability of patents in the aerospace industry. Depending on the degree of legal uncertainty, such companies, and particularly launch companies, may make different choices with respect to relying on trade secret versus patent protection going forward.