



**Running Ahead in the Gold Rush:
The Strategic Use of Patent Scope in Nanotechnology**
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How does patent scope vary over time when a new technological paradigm emerges? Do different types of applicants strategically use patent claims in order to better position themselves in a fast changing competitive environment? This paper intends to provide novel theoretical and empirical contributions on how patent scope varies over time and by type of applicants in emerging technologies, based on a unique dataset of all nanotechnology patent applications at the European Patent Office (EPO) in the period 1980-2006.

It provides the following additional contributions to previous literature (Lerner, 1994; Merges and Nelson, 1990; Lerner and Merges, 1997). First, it exploits the new Y01N tag created by the EPO in order to effectively identify the population of all nanotechnology patent applications at the EPO, thus overcoming possible sample selection biases which might have limited previous research findings. Second, it investigates whether the scope of patents varies with respect to the type of applicants. We argue that different patenting institutions might have different incentives to strategically advance broad patent claims in the early days of a new technological trajectory. In particular, we refer to two types of institutions responsible for an important share of all nanotech patents, namely universities and VC-backed companies.