Mapping the Global Patent Landscape

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Abstract

Patent data provides a key window into the innovation pipeline, but is also difficult to work with and situate within this multi-faceted pipeline. We address this challenge by developing a novel way of mapping the global patent landscape, incorporating nearly 139 million patents from numerous patent authorities from around the world into over 116 thousand patent clusters. We evaluate our patent clusters and show that they represent novel and meaningful groupings of patent activity. We show that our patent clusters can shed new light on the innovation pipeline when analyzed alongside our similarly constructed set of research clusters. We provide an example use case of this cluster-based innovation mapping by tracking the impact of National Institutes of Health research funding from publications to patents. We present a prototype of an open interactive tool that displays our patent clusters and enables users to explore patent clusters and leverage the data for their research on technology and innovation.

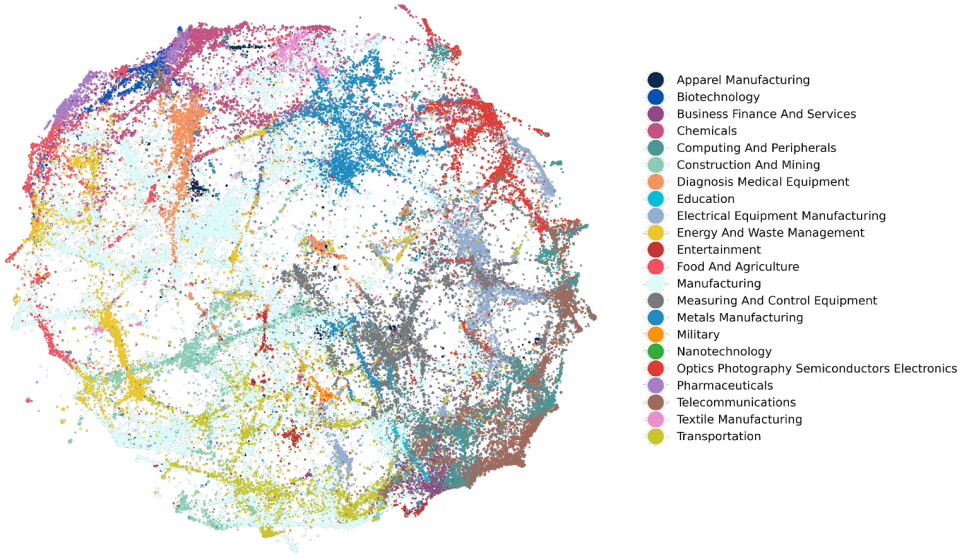


Figure: Global Patent Landscape

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