QUANT IP

Patent Data for Investors

quantifying innovation, generating alpha

7th January 2020

General Information on Patent Data

Patents are a form of intellectual property that gives its owner the legal right to exclude others from making, using, selling, and importing an invention for a limited period of years, in exchange for publishing an enabling public disclosure of the invention. The filing and granting process for a patent includes the following steps – average time from applying in brackets: Application, Publication (18 months), Granting (3-5 years).

All data Quant IP offers is based on publication dates, the first time any party except for the patent office and the applicant have access. All data is point in time, all derived metrics from raw data are based on information available at the time of calculation. The same is true for historical corporate trees, where Quant IP mapped patent documents from applicants to corporate entities listed on stock markets.

For back testing purposes, Quant IP used a time lag of several weeks to avoid any bias. We assumed that access to the data took longer in former times. Patent data has strong variations among industries. This should also be accounted for when using the data.

General Data Points

date

Date of public availability of the provided data. The data can be used at this date for back tests.

shareClassFIGI

Share class Financial Instrument Global Identifier (FIGI, openfigi.com) used to identify securities.

name

Security name.

Innovation Indicators

Inventions

The invention count captures the number of unique inventions a company filed to protect in a given time period. To avoid double counting, Quant IP refers to patent families. A patent family is defined as the collection of documents (applications and granted patents) filed in different jurisdictions related to one invention. Every patent family is only counted once.

inv_count_ltm

This metric is the sum of inventions counted for the last twelve months. The rolling window allows to mitigate the seasonality that patent filings show.

Granted Patents

The grant count captures the number of granted patents a company claimed at time t. The same invention can be granted in several jurisdictions.

grant_count_ltm

This metric is the sum of granted patents for the last twelve months. The rolling window allows to mitigate the seasonality that patent filings show.

min_patents_flag

Percentage of companies within one industry (GICS level 3) with more than 10 patent applications over the last 12 months. This can be used to rank industries according to their exposure to patent related innovation.

Quant IP Innovation Score

QUANT IP® INNOVATION SCORE is a multi-factor indicator derived from patent data and financial data. It is an aggregate of 6 sub-indicators and evaluates the risk/return for a given stock based on innovation strength of the company. A relative metric, it´s value depends on the stock universe and the industry peer group.

peer_group_id

ID of the industry peer group used by Quant IP to calculate the innovation score at every date.

indicator_cov

Percentage of available innovation score indicators at the date. Innovation scores are also calculated if not all indicators are available and missing indicators are considered zero.

innovation_score_ray

Quant IP innovation scores calculated based on companies included in the Russel 3000 Index.

innovation_score_tpx

Quant IP innovation scores calculated based on companies included in the Topix Index.

innovation_score_sxxp

Quant IP innovation scores calculated based on companies included in the STOXX Europe 600 Index.

innovation_score_world

Quant IP innovation scores calculated based on companies included in the Russel 3000 Index, the Topix Index and the STOXX Europe 600 Index.