3PFL Database: Quick Usage Guide
Discovering Patent and Publications with a Public-Funding Linkage

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Overview:

The 3PFL database links information on patented inventions and scientific publications related to a public procurement contract or a research grant awarded by the U.S. Federal Government to detailed contract-level/grant-level information (e.g., awarding agency, recipient organization, award size). We have combined data from multiple sources, including (but not limited to) the United States Patent and Trademark Office bulk database, the Federal Procurement Database System, the Award Submission Portal (ASP), and the European Patent Office's PATSTAT database. We also provide a link to the scientific publications associated with these patents. The 3PFL database provides rich and original information that opens the door to novel empirical research in the economics of innovation and science.

The data are available at www.3pfl.io or at https://doi.org/10.5281/zenodo.3347118

Please cite as follows:

de Rassenfosse G., Jaffe A., Raiteri E. (2019) The procurement of innovation by the U.S. government. PLoS ONE 14(8): e0218927. https://doi.org/10.1371/journal.pone.0218927

Table description:

The dataset is organized around nine relational tables stored in CSV files.

01_patent_contract   [main table]
Identifies all the U.S. patents arising from federal funding as well as the procurement contract / grant number. Note that the term 'contract' in `patent_contract_id` designates either a grant or a procurement contract.

02_procurement_information   [procurement contract table]
Provides various details of the procurement contracts in the database. A procurement contract is included in the database if it generates at least one patent.

03_procurement_year   [procurement contract table]
Provides temporal information about the procurement contracts.

04_vendor_information   [procurement contract table]
Provides information on entities that received the procurement contracts.

05_grant_information   [grant table]
Provides various details of the grants in the database. A grant is included in the database if it generates at least one patent.

06_grant_year   [grant table]
Provides temporal information about the grants.

07_grantee_information   [grant table]
Provides information on entities that received the grants.

08_patent_information   [patent table]
Provides bibliographic information and metrics about the patents that were funded by
federal money.

09_paper_information   [scientific paper table]
Identifies the scientific publications arising from federal funding with a key to link the record
to Clarivate Analytics' Web of Science proprietary database. The field `wos_id` corresponds
to the WOS 'Accession Number'. A license from Clarivate Analytics is required to access the
details of the records.
*The table only includes scientific publications that acknowledge funding from a grants and
procurement contracts that led to a patent. It does not include scientific publications from
grants and procurement contracts that did not lead to a patent.*

For a comprehensive overview, please consult the technical appendix at
https://doi.org/10.1371/journal.pone.0218927.s001

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