**Intellectual Property Government Open Data**

IP Australia is the Australian Government agency that administers intellectual property (IP) rights and legislation relating to patents, trademarks, designs and plant breeder’s rights. It contributes to the innovation system by advising governments and businesses on IP matters. This document is the first step for new users to familiarise with the Intellectual Property Government Open Data (IPGOD) and the Government Open Live Data (IPGOLD) released by IP Australia.

**What is IPGOD / IPGOLD?**

IPGOD / IPGOLD include over 100 years of registry data on all IP rights administered by IP Australia. It also has derived information about the applicants who filed these IP rights, to allow for research and analysis at the regional, business and individual level.

Each data release or iteration of IPGOD provides a snapshot of IP data of applications filed up to the final day of the previous year. For example, IPGOD 2017 includes applications with a filing day at or before 31/12/2016. IPGOLD is IPGOD but with many of the data tables updated on a weekly basis.

IP Australia releases both products to serve different purposes. Researchers have a preference for IPGOD as the data remains constant over time. This means that statistical analysis that uses IPGOD as a source could be reproduced at a later date. Developers and analysts may have a preference for IPGOLD as it contains the most up to date information in the same data file structure.

**How do I use IPGOD / IPGOLD?**

IPGOD is large, with millions of data points across up to 40 tables, making them too large to open with Microsoft Excel. Furthermore, analysis often requires information from separate tables which would need specialised software for merging. We recommend that advanced users interact with the IPGOD / IPGOLD data using the right tools with data compression. This includes a wide range of programming and statistical software such as R, SQL, Python, Stata, SAS, Tableau and Qlik Sense.

Users can also access IPGOD without these specialised tools via IP NOVA ([ipnova.ipaustralia.gov.au](https://ipnova.ipaustralia.gov.au))

IP NOVA is a web-based search engine and data visualisation platform developed by IP Australia that enables its users to quickly gather information about intellectual property on specific keywords such as location, industry or field of work. Users can then perform customisable analysis without having to use programming and statistical software to interrogate the IPGOD data directly.

Most of the technical information about IPGOD / IPGOLD exists in the data dictionaries.

**Concerning the 2018 data release . . .**

IP Australia changed how we construct the applicant tables in IPGOD to improve data quality.

IPGOD 2018 is released in two editions of the same underlying data. IP Australia revised how the *ipa\_id* is constructed in the first edition by adopting a machine learning process that compared applicant names in each country to identify those that were most likely the same organisation or individual and assigned a common *ipa\_id* accordingly. This process consolidated the *ipa\_id* from IPGOD 2017 by 4877 (1.96%) in patents, 7666 (1.50%) in trademarks, 1356 (2.64%) in designs and 59 (3.03%) in plant breeder's rights. We also refined the algorithm that identifies whether an applicant is a corporate entity or private individual.

We took this process further in the second edition and consolidated 10,727 *ipa\_id* for Australian business applicants that also changed names. This was facilitated by our improved ABN matching technique to correct 17,857 (11.17%) of 159,887 existing ABNs from the 2017 data and identify 41,870 new ABNs in IPGOD 2018 and 22,385 in IPGOD 2017.

IP Australia is also subscribing to the Orbis database directly. Using better quality ABNs on the Orbis data allowed us to identify 6,455 large firms in IPGOD 2018 and 6,407 instead of 4,000 in the 2017 data. This reduces the number of false positives about the IP activities of Australian SMEs. Firm size is then used to derive applicant type, which includes 163 manually identified research organisations.

We also used Google Maps to geocode applicant addresses and made 51,067 (23.53%) corrections to 217,028 existing addresses and mapped 19,570 new addresses. We are using this information to derive local government areas, SA2, greater capital cities as well as federal electorates.

IP Australia also created the **IPGOD100 consolidated patent summary** to help answer most things about patents in the one place. This table saves analysts the hassle of having to merge some of the same separate tables over and over again. IPGOD100 currently includes **43** data items rolled up to the application level, using data from **14** separate IPGOD tables, and these are:

* **109** for innovation patent certification information
* **127** to retrieve early termination date and status
* **128** to derive divisional parents and children
* **126** for patent conversions to and from
* **110** for the number of citations
* **108** for the number of oppositions
* **121** for pharmaceutical extension of terms
* **129** to get additional earliest priority date
* **107** for most dates on IPA processes
* **102** to summarise applicant information
* **125** to derive changes of ownership
* **122A** for patent descriptions
* **104** to get the IPC mark value for WIPO tech fields
* and **WIPO Technology Concordance** table

**What support exists?**

Man, Bradley. 2014. Overview of the Intellectual Property Government Open Data. IP Australia. [www.ipaustralia.gov.au/sites/g/files/net856/f/reports\_publications/ip\_government\_open\_data\_paper\_-\_final.pdf](http://www.ipaustralia.gov.au/sites/g/files/net856/f/reports_publications/ip_government_open_data_paper_-_final.pdf)

Patents – [www.ipaustralia.gov.au/patents/understanding-patents/patent-basics](http://www.ipaustralia.gov.au/patents/understanding-patents/patent-basics)

Trademarks – [www.ipaustralia.gov.au/trade-marks/understanding-trade-marks/trade-mark-basics](http://www.ipaustralia.gov.au/trade-marks/understanding-trade-marks/trade-mark-basics)

Designs – [www.ipaustralia.gov.au/designs/understanding-designs/design-basics](http://www.ipaustralia.gov.au/designs/understanding-designs/design-basics)

Plant breeder’s rights – [www.ipaustralia.gov.au/plant-breeders-rights/understanding-pbr/pbr-basics](http://www.ipaustralia.gov.au/plant-breeders-rights/understanding-pbr/pbr-basics)

**Who do I contact about IPGOD / IPGOLD?**

Any questions about IPGOD / IPGOLD should be directed to the [ipgod@ipaustralia.gov.au](mailto:ipgod@ipaustralia.gov.au) mailbox. If you have a question, please don’t hesitate to ask! We look forward to working with our end users to continuously improve our data product.