

## Day 1 Exercises A – Exercises on patent families

We are going to use following freely accessible databases offering patent family information, patent status data and file inspection:

**EPO Espacenet:** <http://worldwide.espacenet.com/>

Espacenet also permits access to the EPO Register which permits file inspection of applications pending at the EPO (note the similar look of the Register and Espacenet interfaces):

**EPO Register:** <https://register.epo.org/espacenet/regviewer>

**EPO CCD:** <http://www.trilateral.net/ccd>

**WIPO Patentscope** (no explicit family information but information on selected PCT national phase entries, some of them being linked to the respective national registers): <http://www.wipo.int/patentscope/search/en/search.jsf>

**US-PAIR** (only information on US national families, e.g. continuations):

<http://portal.uspto.gov/external/portal/pair>

**DPMA Register:** <http://register.dpma.de/DPMAregister/Uebersicht?lang=en>

The objective of these exercises is to familiarize ourselves with patent families (such with and without priorities) and the online resources permitting access to family information.

**Task 1:** [WO2011074782](http://www.espacenet.com/WO2011074782) in Espacenet

Q: Are the simple and extended families different?

A: No, both the simple family ("also published as") and the extended family (Inpadoc) comprise a total of 4 individual publications.

Q: How many domestic families are included in the extended family?

A: The extended (and simple) family includes three domestic families (EP-A2; KR-A; WO-A2, WO-A3)

Q: Compare the priorities. How many are there?

A: There are two KR priorities. The EP-A2 shows an additional third priority in the HTML view. However the PDF copy of the EP-A2 shows only the two KR priorities. The third priority shown in the HTML view is the application number of the corresponding WO application. The EP-A2 is only a publication of the national phase entry. This third priority is therefore not representing a different additional priority document; the placing of all 4 publications in the same simple family is therefore correct although the comparison of the HTML view shows different sets of priorities.

Q: Check the family information of the same document in the CCD; can you view domestic families?

A: (To see only the members of each family without citations, click on "compact view".) The CCD initially shows the simple family in the left hand table; however it displays only application numbers, no publication numbers. The different publication stages WO-A2 and A3 are therefore not shown in the left hand table. They become only visible through the extra small drop down menu that appears in the heading "bibliographic data" in the inspector window after selecting an

application number in the left hand table. This extra drop down menu appears always if the domestic family associated with the selected application number has more than one member. Thus, the domestic families can only be viewed by subsequently clicking on each application number in the simple family. Espacenet therefore more easily permits the spotting of publications of granted applications.

**Task 2:** DE19833712 in Espacenet

Q: How many domestic families are included in the extended (Inpadoc) family of DE19833712 ?

A: To see all domestic families, view the Inpadoc family in Espacenet. 5 domestic families are shown: DE-A1/B4, FR-A1/B1, 2x JP-A/B2, US-A1/B2; i.e. there is one additional JP domestic family in comparison to the simple family.

Q: Which domestic family is not part of the simple family and why?

A: The domestic family comprising JP 2007304109 A & JP 4179389 B2; compare the Inpadoc family with the equivalents shown under "also published as" (i.e. the simple family), or see the family information in the CCD. This domestic family claims the additional priority JP20070178418.

Q: How many domestic families are therefore included in the simple family of DE19833712?

A: 4 domestic (DE, FR, JP, US), see the field "also published as".

Q: How many family members has the extended family, including all domestic family members, and the simple family?

A: The extended family has 10 (DE-A1, DE-B4, FR-A1, FR-B1, 2x JP-A, 2x JP-B2, US-A1, US-B1) and the simple has 7 members, respectively; when one mentions the number of family members, one usually means all publications, including the subsequent ones included in each domestic family; the CCD however counts domestic families when indicating the family size.

Q: How many JP national families are there in the extended family?

A: Just one national family but two domestic JP families; both domestic families are linked through the priority of the older JP application which is claimed for the younger JP application and therefore build a national family.

Q: The FR-B1 publication is not shown as a member of the simple family of the DE-A1 document. Is this correct?

A: No, it appears to be a data error. The priorities of the FR-A1 and therefore also of the FR-B1 are identical to the two priorities of the DE-A1 document. The same error occurs when you view the simple family of the US-A1 and the JP-A; the FR-B1 is always missing.

Q: Check the family information of the same document in the CCD; how can you tell that the extended and simple families are different?

A: The left hand table initially shows the simple family of the document searched. The lower line of the left hand table however reads "simple families: 2" which means that the extended family of the document searched comprises two different simple families. To get the extended family you need to click on link "Get all family members" which has to read as 'Get all Inpadoc family members'.

After clicking this button the left hand table includes all application numbers belonging to the extended (Inpadoc) family. In this view, the simple families comprised by the extended family are separated by "+" signs. If you want to see all domestic families included in the extended family you have to select "Sort by country"; note that, with this sorting, simple families are not displayed.

**Task 3:** [DE102004051671A1](#), [AU5314899A](#), [US6565803](#), in Espacenet and CCD

Q: Check the size of the families. Can you count or guess how big the Inpadoc families are? Are the simple families smaller or equal in size?

A: The family size is indicated for the Inpadoc families in the left upper corner of Espacenet; and the lower line of CCD.

**DE102004051671A1:** The simple and extended family are of same size (7 domestic families).

**AU5314899A:** This example illustrates that there may be very big extended families:

- simple family: 16 (15) domestic families
- Inpadoc family: 144 domestic families (according to Espacenet)  
47 simple families (according to the CCD; error may occur when retrieving all members)

Note that there are two EP domestic families which constitute one national family (subsequent publications being part of a particular domestic family need to have the same application number; here, application numbers are different). Note that two AU family members have almost the same application number, except for a "D" appended in one of them. That may be a typo and the total number of domestic families would then be 15.

Many extensions, i.e. big simple families comprising many domestic families, are evidence that these inventions are commercially quite important and have a global market. That is typical for medicines.

Family members of such huge extended families which belong to different simple families may relate to different inventions that only have the area of technology in common:

- e.g., AU6158700A, which is not part of the simple but the extended family of AU...899A, refers to a vaccine for prostate cancer while AU..899A refers to a composition and method for diagnosis and therapy of prostate cancer;
- note that AU..700A also has additional applicants, and claims 11 different priorities while AU..899A claims 8 different priorities. Both applications have not a single of these priorities in common, i.e. both applications are not in the same complex family.

**US6565803:** This is an example for an apparent data error. It shows that family information should not be used without checking its plausibility.

The simple family comprises 14 domestic families according to Espacenet. According to CCD it comprises only 7 domestic families. Family members from HK, IL, JP, MX, NZ WO are missing here.

When searching the document in CCD, it is initially estimated that there are only 3 simple families in the extended family. After retrieving the extended family the exact number of 201 simple families is shown. When sorting the CCD display according countries, the extended family seems to comprise, e.g., 199 (!) Australian domestic families. In the Espacenet view of the extended family, these AU domestic families have different titles, different applicants and different inventors though they are all in the medical field. It is not straightforward to analyze the reason for that; but most likely a data error like a mistyped priority number has occurred and linked many different applications into the same extended family.

#### Task 4: [WO2007008499](#)

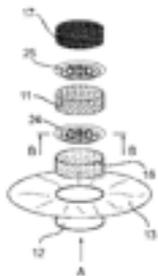
Q: Check the titles of the Inpadoc family members; what do you notice?

A: The Inpadoc family is much bigger than the simple family (domestic families), however partly due to a data error. Some titles are quite different ("Zosuquidar,..."; "Content presentation optimizer"); the inventions appear to be in quite different areas of technology (compare the IPC codes). This is another sample for data errors that sometimes occur; different inventions are mixed, most likely because of a typo in a priority information; note also the various inventor names.

#### Task 5: Sample of technical family ("Nargileh")

This is a real case. The patent office of "O" received an application from a foreign inventor in English language for which no priority was claimed. The foreign nationality of the applicant and the submission of the application in English are indicators that the application may have been filed elsewhere and that examination results may be available.

Inventor name: SHRAIBER Michael  
Title: Tobacco cartridge for narghiles  
Drawing:



Q: Check whether there are similar applications which constitute a **technical family** together with the "O" application. Search for the inventor name Shraiber.

A: A short Espacenet search for the inventor name Shraiber returns several applications with similar titles. Subsequent comparison of drawings shows that the application filed with "O" is similar to an application filed with the USPTO which was granted by the USPTO on 17.8.2010 as [US7775218B2](#). Furthermore, an EP patent [EP1702525B1](#) belonging to the same simple family was granted and published on 28.10.2009, i.e. almost one year earlier.

For those applications the inventor used his first name Mickey instead of Michael, which he used for filing with "O". However, since both names are similar and since the title is similar you needed to check all the drawings and other parts of the application (not included here) which then confirm their identity.

When you search both first and given name ("SHRAIBER Michael") as inventor name you would not find the proper documents. You would find only the other similar applications filed in AU, CA, MA and MY where he used the name Michael. They are also relevant but less interesting since no patent was granted and no search report is available. Moreover, these applications also appear to be identical with the US application, but they were filed without claiming the US priority. Most likely Shraiber filed there the same application that he filed in "O".

### Task 6: More technical families

Q: The table below represents real cases of applications filed with the patent office of "X" for which "X" requested support by WIPO's ICE service. "X" provided the below table including the title, applicant and inventor names. Priorities were not claimed in "X". Are there technical families for these applications?

Title	Applicant	Inventor(s)
Method for making betel nut flavor chewing gum	Liu, Yen-Hsun	
Il-17ra-il-17rb antagonists and uses thereof	AMGEN INC	1)BUDELSKY ALISON L 2)COMEAU MICHAEL R 3)Tocker Joel
Liposome composition	Eisai R & D Management Co., Ltd	
Insecticidal polymatrix Comprising PBO and DM	Vestergaard Frandsen SA	
Pumping device	DJERASSEM Le Bemadjel	
Audio decoder an decoding method using efficient down mixing	Laboratories licensing Corporation; and Dolby International AB	
A Screw capable of rapidly drilling and cutting	TAIWAN SHAN YIN INTERNATIONAL CO.,LTD	
Mesoionic pesticides	E.I. DU PONT DE NEMOURS	PAHUTSKI THOMAS FRANCIS JR
A fan system with light assembly and emergency power supply	ALPHA HOME APPLIANCES SDN BHD	

A: The search for applicant names and titles is straightforward. The below table indicates if and which family members exist; it provides evidence that the vast majority of applications filed in developing countries by foreign applicants without the claiming of a foreign priority are members of a technical family and that relevant patent information is accessible through the internet free of charge:

Title	Applicant	Inventor(s)	Family member
Method for making betel nut flavor chewing gum	Liu, Yen-Hsun		<a href="#">TW201138646</a>
Il-17ra-il-17rb antagonists and uses thereof	AMGEN INC	1)BUDELSKY ALISON L 2)COMEAU MICHAEL R 3)Tocker Joel	<a href="#">WO2009136976A3</a> <a href="#">WO2009136976A3</a>
Liposome composition	Eisai R & D Management Co., Ltd		<a href="#">WO2010113984A1</a>
Insecticidal polymermatrix Comprising PBO and DM	Vestergaard Frandsen SA		<a href="#">WO2010015257A3</a>
Pumping device	DJERASSEM Le Bemadjiel		<a href="#">WO2010093267A3</a>
Audio decoder an decoding method using efficient down mixing	Laboratories licensing Corporation; and Dolby International AB	Thesing, Robin Silva, James Andersen, Robert	<a href="#">WO2011102967A1</a>
A Screw capable of rapidly drilling and cutting	TAIWAN SHAN YIN INTERNATIONAL CO.,LTD	Su, Kuo Tsair Su, Yu Jung	<a href="#">EP2444678A1</a>
Mesoionic pesticides	E.I. DU PONT DE NEMOURS	PAHUTSKI THOMAS FRANCIS JR	<a href="#">WO2012092115A1</a>
A fan system with light assembly and emergency power supply	ALPHA HOME APPLIANCES SDN BHD	Yeo, Peng Lian	No family member in Espacenet