



Europäisches
Patentamt

European
Patent Office

Office européen
des brevets

Searching for patents

Products and services
from the European Patent Office



*As the world's leading provider
of patent information,
the European Patent Office aims
to offer the best patent databases
in the world: complete, correct,
up to date and easy to use.*

About patents, ...

What is a patent?

A patent is a legal title which protects a technical invention for a limited period. It gives the owner the right to prevent others from exploiting the invention in the countries for which it has been granted.

Patents are published so that everyone can benefit from the information they contain.

A

B

C

D

waterwaster, food wasterwaster, and recently hydrolyzate from corn stover biomass has been conducted and for this purpose several different types of MFCs has been developed both for batch and continuous mode operations.

FIELD OF THE INVENTION

17 EP 2 000 000 A1 18

comparing to the previous result (Figure 8). The cathode potential of 0.004 V was initially developed, and then decreased sharply down to - 0.131 V within about 21 hr. However, at this time, the anode potential decreased

Claims

1. A microbial fuel cell, comprising

(i) an anode electrode,

the chamber is influent through the chamber, while particulate the cathode microbial electrode

in 1, wherein the chamber is surrounded by at least 50%, e.g. at least

in 2, wherein the chamber is surrounded by at least 80

benefit benefits variation from the previously compared to its process is from be used only oxidizing oxide with a closed in pipes difficulties environments e.g. waste-water needs to feed the back is up a lot of the MFC ed for an im-

Fig. 1

Drawing pages of EP2000000 A1

What does a patent look like?

Patent documents consist of

- A** a first page comprising basic "bibliographic" information, such as the title of the invention and the name of the inventor, as well as the application number and date, etc,
- B** a detailed description of the invention, indicating how it is constructed, how it is used and what benefits it brings compared with what already exists,
- C** claims, defining the scope of protection sought,
- D** drawings

... patent databases and patent information

Why search in patent databases?

Patent documents contain information which can be vital to a broad variety of professions. These range from technical developers and researchers to legal advisers and business strategy managers.

Patent information can be useful in many ways. It can help you to:

- **find out what already exists and build on it**

If you are faced with a technical problem, there is no better way of finding out what solutions are already available than by looking at patents.

- **keep track of who's doing what**

Technical details of research being carried out by your competitors may well appear first in a patent document, long before the product reaches the market.

By monitoring patent documents, you can keep an eye on your business competitors or even locate potential partners.

- **watch the market**

Identify patents that are no longer in force and can be freely used. By watching patent publications, you can spot trends in technology or the market at an early stage.

- **avoid infringing other people's patent rights**

Before you launch a new product or service, you need to make sure that you will not be infringing someone else's patent. Patent information will help you here, too.

What is patent information?

Patent information is the name we give to the technical information you find in patent documents, plus any legal and business-relevant information about them.

This brochure describes patent information products and services available from the European Patent Office and divides them into three categories:

technical information

legal information

business information

For more information visit:
www.epo.org/searching-for-patents
For details on ordering and prices:
www.epo.org/ordering

Products and services for technical information

- Millions of patents for you to search
- Each describing a technical solution
- EPO publications only or with worldwide coverage
- Machine translation available for 32 languages

Products:

- **Espacenet**
- **Open Patent Services**
- **European Publication Server**
- **EP full-text search**
- **Global Patent Index**

search

www.epo.org/espacenet

Espacenet

With its worldwide coverage and simple search features, the free **Espacenet** service is a great way to get started with patent information.

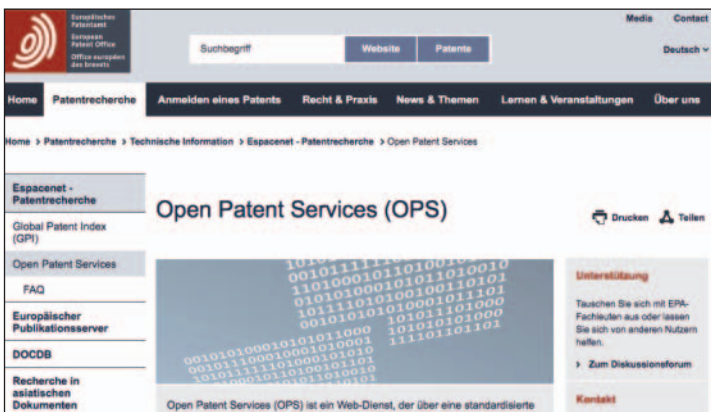
The screenshot shows the Espacenet website interface. At the top, there is a navigation bar with the Espacenet logo and the text 'Espacenet Patent search'. Below this, there are tabs for 'Search', 'Result list', 'My patents list (0)', 'Query history', 'Settings', and 'Help'. The main content area features a 'Smart search' section with a search input field containing 'Siemens EP 2007' and a 'Search' button. To the left, there are sections for 'Advanced search', 'Classification search', 'Maintenance news', 'Espacenet outages', 'News RSS feeds', 'Latest updates', and 'Related links'. A prominent banner at the top of the main content area reads 'Espacenet: free access to the database of over 90 million patents'.

- Key uses
- Watch new technologies emerge
 - Find solutions to your technical problems
 - Discover what your competitors are developing
 - Identify business partners

- Features
- Access to more than 95 million patent documents from all over the world from 1836 to today
 - Patent family information
 - Forward and backward citations
 - Patent Translate – machine translation tool
 - Technology-specific searching using classification symbols
 - Secure access
 - Legal status information
 - RSS feeds
 - Links to national patent registers
 - File wrapper information from partner patent offices

Open Patent Services

The **Open Patent Services (OPS)** web service gives you access to data from the EPO's worldwide databases and the freedom to create your own interface for accessing it.



- Key uses
 - Program your own interface for in-house use or set up services for customers
 - Customise your patent databases and track patent status changes
 - Download data and enrich your own applications within the limits of the EPO's fair use policy
 - Link patent data to your website or online service
- Features
 - Worldwide bibliographic data, patent families, citations, legal status and full-text documents
 - EP register data
 - CPC classification scheme
 - Highly structured XML format
 - Machine-to-machine communication

Publish

www.epo.org/publication-server

European Publication Server

The **European Publication Server** is the EPO's official publication platform. It is the place to go for copies of

- European patent applications
- granted European patent specifications
- corrected documents.

New publications are loaded once a week on Wednesday, usually at 14.00 hrs CET. The server is free to use. Documents can be retrieved using either publication number, application number, publication date, kind code or IPC symbol.

The screenshot shows the European Publication Server website. At the top, there is a search bar and navigation links for 'Website' and 'Patents'. Below the search bar, there is a navigation menu with options like 'Home', 'Searching for patents', 'Applying for a patent', 'Law & practice', 'News & Issues', 'Learning & events', and 'About us'. The main content area is titled 'European publication server' and features a search form with fields for 'Publication no.' (containing 'EP3131004') and 'Application no.' (containing 'EP14827997'). There are also links for 'Print' and 'Share'. On the right side, there is a 'Support' section with a link to 'Visit the discussion forum'.

Key uses ■ Download official publications of European patent documents

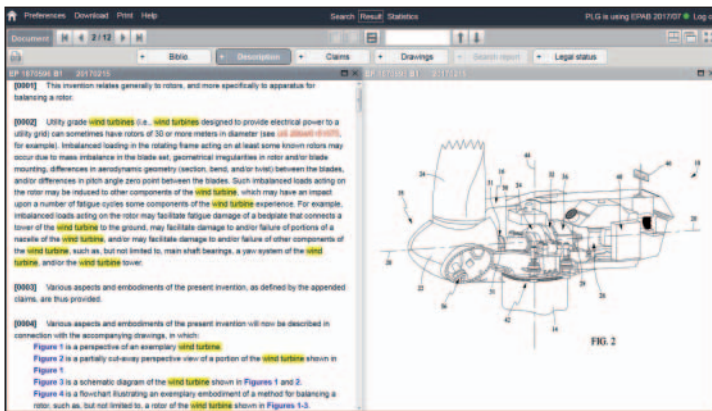
Features ■ Free authoritative source of European patent applications (A documents) and specifications of granted European patents (B documents) from 1978 to the present

- Download option for individual documents in character-coded PDF/A or XML format
- Link to complementary data such as family and procedural data via Espacenet or the European Patent Register

EP full-text search

This free-to-use online tool gives you access to European patent applications and granted patents.

EP full-text search enables you to search European patent applications (A documents) and granted patents (B documents) and monitor new publications as they appear. It features advanced search capabilities, including full-text searching.



- Key uses**
- Watch new technologies emerge in Europe
 - Discover what your competitors are protecting in Europe
 - Identify business partners active in Europe
 - Analyse European patents in various areas of technology
- Features**
- Free expert bibliographic and full-text search of European patent applications and granted patents from 1978 to today
 - Over 60 search criteria, including technology-specific, forward citation, description and claim search, searches in English, French and German
 - Customisable results for display and download
 - Customisable statistical visualisation of the results

Global Patent Index

Global Patent Index (GPI) is an advanced online search tool that enables you to perform expert patent searches based on the EPO's worldwide bibliographic and legal status patent data.

#	CPC group	Documents	Ranking (%)
1	<input checked="" type="checkbox"/> B29C87	3 889	19.57
<input type="checkbox"/> B33 PERFORMING OPERATIONS; TRANSPORTING <input type="checkbox"/> B33Y SHAPING <input type="checkbox"/> B33Y ADDITIVE MANUFACTURING TECHNOLOGY <input type="checkbox"/> B33Y10/00 ADDITIVE MANUFACTURING, i.e. MANUFACTURING OF THREE-DIMENSIONAL [3-D] OBJECTS BY ADDITIVE DEPOSITION, ADDITIVE AGGLOMERATION OR ADDITIVE LAYERING, e.g. BY 3-D PRINTING, STEREOLITHOGRAPHY OR SELECTIVE LASER SINTERING <input type="checkbox"/> B33Y10/00 Processes of additive manufacturing			
2	<input checked="" type="checkbox"/> B33Y10	2 544	12.80
3	<input checked="" type="checkbox"/> B33Y30	1 827	9.19
4	<input checked="" type="checkbox"/> B22F3	1 755	8.83
5	<input checked="" type="checkbox"/> B33Y90	1 423	7.16
6	<input checked="" type="checkbox"/> Y02P10	1 421	7.15
7	<input type="checkbox"/> B33Y80	1 144	5.76
8	<input type="checkbox"/> B22F2003	981	4.94

Selected terms Copy Clear Query (GPI 2017/07 - search result: 19 870 (applications: 16 727))

- Key uses**
- Watch new technologies emerge
 - Find solutions to your technical problems
 - Discover what your competitors are developing
 - Identify business partners
 - Identify new technology trends with high precision

- Features**
- Highly advanced search capabilities
 - Approximately 100 different search criteria
 - A query manager for saving and reusing search queries
 - In-depth indexing of the data, making it more searchable
 - Customisation of on-screen presentation and data download to fit your needs
 - Graphical visualisation of search results

Products and services for legal information

Discover the potential of the EPO's legal patent information, see

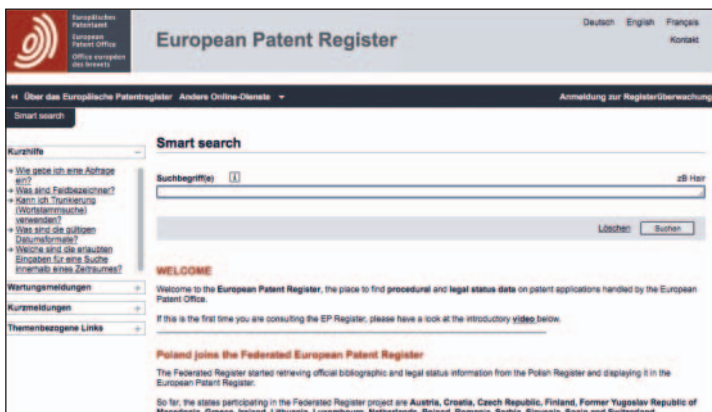
- if and where a patent has been granted
- if it is valid
- if there is still time to challenge it, and much more.

Products:

- **European Patent Register**
- **European Patent Bulletin**
- **EP Bulletin search**

European Patent Register

The **European Patent Register** is the place where the European Patent Office stores all the publicly available information it has on European patent applications as they pass through the grant procedure. This free internet service comes with an alert system.



- Key uses
- Find out what stage in the procedure a European patent application has reached
 - See whether a European patent application has been granted or will be granted soon
 - Check whether any oppositions to a European patent have been filed
 - Read correspondence between the EPO and a patent applicant/attorney
 - Download data for later study

- Features
- Information on all published European patent applications
 - Access to the complete public file for each patent application
 - Links to the registers of national patent offices around Europe
 - Federated Register: live bibliographic and legal status data from partner patent offices in Europe
 - Global Dossier: file wrapper information from partner patent offices
 - Register Alert: notifying you whenever there is a change in the procedural status of any European patent application you are monitoring



www.epo.org/bulletin

European Patent Bulletin

Published weekly, the **European Patent Bulletin** is the official source of public notifications on legal and procedural events in the life of European patent applications and granted patents.

The European Patent Bulletin offers free downloadable files containing bibliographic and procedural data.

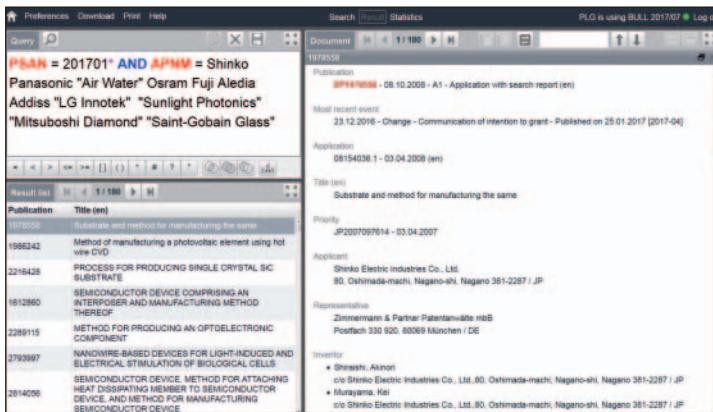


- Key uses
- Monitor the legal status of European patent applications and granted patents within the European patent prosecution framework
 - Check and keep track of the legal status of European applications and patents

- Features
- Download option for individual documents in character-coded PDF/A format from 1978 to today

EP Bulletin search

Comprehensive online access to bibliographic and procedural information on European patent applications and granted patents.



- Key uses
 - Check and keep track of the legal status of European applications and patents
- Features
 - Expert search of bibliographic, legal and procedural information on European patent documents from 1978 to today
 - Customisable results for display and download; query save options for later use
 - Searches in English, French and German, 70 search criteria, including technology-specific search
 - Customisable statistical visualisation of the results

Products and services for business information

Patent statistics and patent portfolio valuations are excellent sources of business information. Patent intelligence can help companies and patent information specialists gain an overview of a particular technical field, to gather information relevant to major decisions and increase their competitiveness.

The PATSTAT product line:

- **PATSTAT Biblio**
 - 100 million patent records
 - 90 patent-issuing authorities
 - From the mid-19th century up to today

- **PATSTAT Legal Status**
 - 200 million legal status records
 - 45 patent-issuing authorities

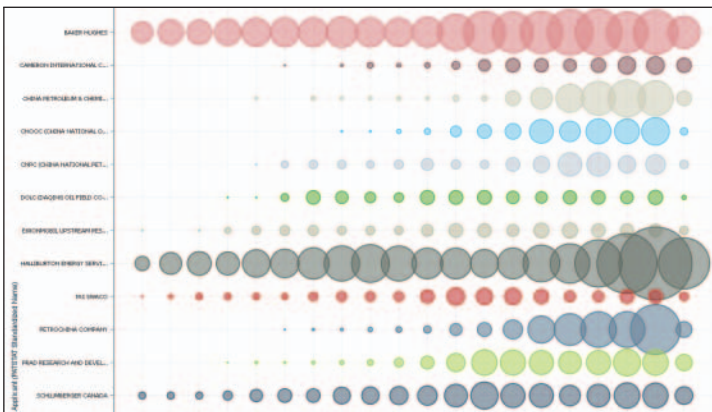
- **PATSTAT Register**
 - Legal status and procedural data on European patents (EP) only
 - Data indexed by a wide range of criteria

PATSTAT is available online or as a complete database.

The PATSTAT product line

The **PATSTAT product line** is uniquely suited to conducting sophisticated analyses of bibliographic and legal status data. It has become a standard in the field of patent intelligence and statistics.

It consists of three individual databases available in raw data format or via PATSTAT Online, a web-based interface. With PATSTAT Online, you can run queries in the databases, conduct statistical analyses, view the data and download it for offline use.



- Key uses
 - Main data sources for patent analytics and patent intelligence
 - Quantitative statistical analysis
 - Identifying patent filing trends
 - Discovering technology flows
 - Quantifying the knowledge market

- Features
 - Highly detailed patent and legal data from many patent authorities
 - Includes hundreds of years of data
 - Specially formatted for statistical work
 - Available in open data format (CSV), linkable to other data sets
 - Basic pre-defined statistics and patent-value indicators in PATSTAT Online
 - Easy extraction of large data samples for offline analysis
 - Produced twice a year

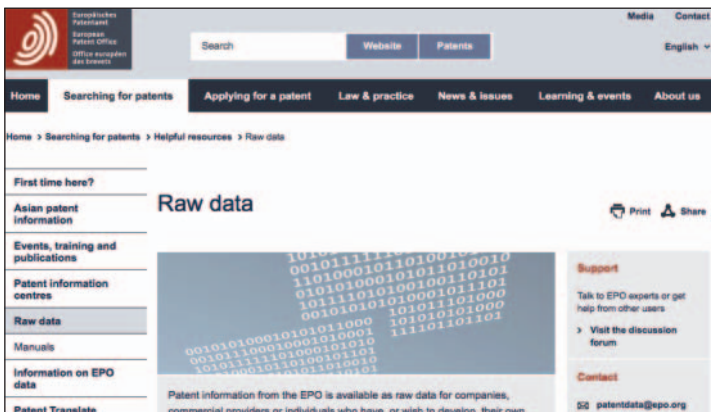
Additional resources

In this section:

- **Raw data products**
- **Asian patent information**
- **Training**
- **Patent information forum**

Raw data products

The EPO's **raw data products** are bulk extractions of the EPO's patent data collections. They provide the basis for all major patent information services worldwide and are of key importance to companies, patent attorneys and research institutes in all sectors.

A screenshot of the EPO website's 'Raw data' page. The page features a navigation bar with links like 'Home', 'Searching for patents', and 'Applying for a patent'. A search bar is visible at the top. The main content area is titled 'Raw data' and includes a sidebar with various links such as 'First time here?', 'Asian patent information', and 'Events, training and publications'. The central part of the page displays a large graphic with binary code (0s and 1s) and the text 'Raw data'. Below this graphic, there is a paragraph stating: 'Patent information from the EPO is available as raw data for companies, commercial providers or individuals who have, or wish to develop, their own'. On the right side, there are sections for 'Support' (with a link to 'Visit the discussion forum') and 'Contact' (with the email 'patentdata@epo.org').

Key uses

- Lay the foundation for your own patent databases
- Use the data for your data search and analysis tools

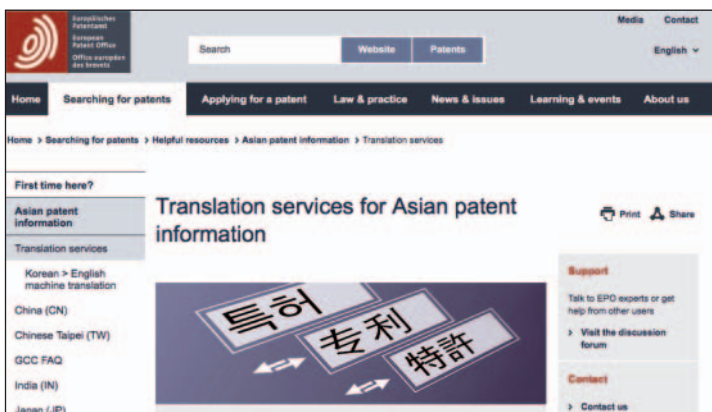
Features

- EPO worldwide bibliographic database (DOCDB)
- EPO worldwide legal status database (INPADOC)
- European Patent Register data
- EP bibliographic data (EBD)
- EP full-text data
- National full-text data
- First-page images
- Sequence listings

Asian patent information

The growing number of patent applications in Asia poses a challenge for patent searchers, not least in terms of language.

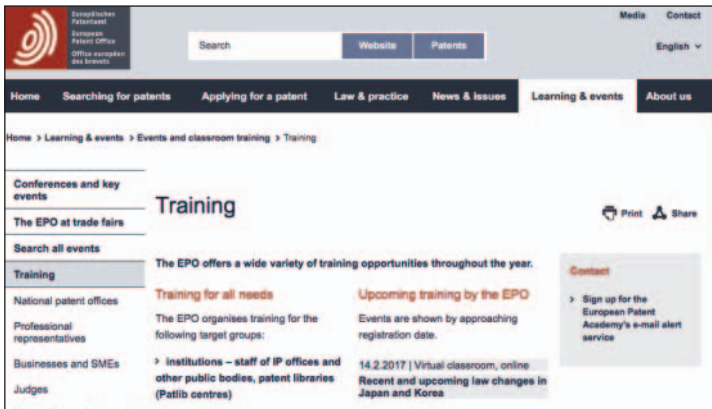
The EPO offers a special support service for users of patent information from Asia.



You can contact the EPO's **Asian patent information** experts for answers to the most frequently asked questions on industrial property in Asia:

- background information on filing trends, grant procedures, numbering systems and patent terminology
- help with searching free sources of patent information in Asia
- search services in original-language databases human translations of Japanese, Chinese and Korean patents and utility models, and machine translations of Korean patent documents
- training on patent systems, patent documentation and free sources of patent information in Japan, China, Korea and India
- updates on changes in legislation and other essential news from Asia.

Training



Live online training

- scheduled live webinars via the internet
- regular online patent information news sessions

Self-paced e-learning

Use our free web-based training modules to learn more about patent information:

- Patent Information Tour (www.epo.org/pi-tour)
- European Patent Register Assistant (www.epo.org/register-assistant).



www.epo.org/forums

Patent information forum

Get all the news and views about the EPO's online products in the patent information discussion forum.

Discussion forum		Contact	FAQ	
* About discussion forums Search all forums: <input type="text"/> <input type="button" value="Submit"/> * Advanced search Register Login				
Forums home				
View unanswered posts • View active topics				
PATENT INFORMATION PRODUCTS AND SERVICES		TOPICS	POSTS	LAST POST
Patent Information Matters Here you can find announcements regarding the EPO's patent information products and services, events and activities. Please also feel free to ask questions and share information on general patent information matters.	39	54	by Patent information 2 u on Fri Feb 03, 2017 10:53 am	
Patent Information Training Announcements, information and exchange on the EPO's patent information related seminars, webinars and e-learning activities.	11	16	by ptraining u on Wed Mar 01, 2017 1:55 pm	
Asian Patent Information Services This is your chance to raise your questions or discuss challenges, trends and hot topics around patent information from Asian countries.	31	45	by asiainfo u on Mon Feb 06, 2017 3:27 pm	
Espacenet Here you can post your opinions, ask questions and share information on Espacenet.	60	155	by Patent information 2 u on Thu Mar 02, 2017 1:28 pm	
EP Publication and Search Here you can post your opinions, ask questions and share information regarding the following services: European Publication Server (EPO's official publication platform), European Patent Bulletin (Searching procedural data of EP A and B documents via the Patent information services for experts interface) and EP full-text data (Searching the full text of EP A and B documents via the Patent information services for experts interface).	11	19	by OPS support u on Wed Oct 12, 2016 12:10 pm	
European Patent Register and Register Alert Here you can post your opinions and share information regarding the European Patent Register (formerly Register Plus) and Register Alert!	23	24	by Patent information 2 u on Thu Feb 02, 2017 2:58 pm	
Open Patent Services (OPS) and raw data subscription products This space is made available to users of Open Patent Services (OPS) web-service and now also to users of EPO's raw data subscription products such as 14.7 DOCDB - worldwide bibliographic master database, 14.11 Worldwide legal status (WPA4000), 14.12 EP full text in XML, 14.1 ESO and more.	211	653	by OPS support u on Fri Mar 03, 2017 1:24 pm	

- Key uses
- Read posts and ask questions
 - Answer other users' queries
 - Use key words to search the content of the forum
 - Subscribe to individual forums to receive e-mail notifications

Espacenet, INPADOC and PATSTAT are registered trade marks of the EPO.

Published and edited by European Patent Office, Vienna, Austria © EPO 2017 All rights reserved

Where to get additional help

Visit epo.org

- > Patent search at epo.org/espacenet
 - > European Patent Register at epo.org/register
 - > Online filing services at epo.org/online-services
 - > Training at epo.org/academy
 - > Job vacancies at epo.org/jobs
 - > FAQs, publications, forms and tools at epo.org/service-support
 - > EPO forums at epo.org/forums
-

Subscribe

- > Our newsletter at epo.org/newsletter
-

Visit epo.org/contact

- > Contact forms to send enquiries by mail
 - > Our Customer Services phone number
 - > Our contact details
-

Follow us

- > facebook.com/europeanpatentoffice
 - > twitter.com/EPOorg
 - > youtube.com/EPOfilms
 - > linkedin.com/company/european-patent-office
-