

Discovering standards and patents

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Engineering Librarian



Today's Agenda

1. Standards

British standards

ATSM standards

ASME standards

IEC standards

Others

2. Patents

Derwent innovations index

Scopus

Others



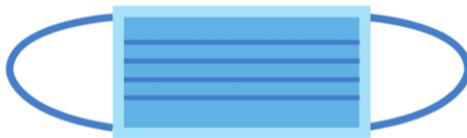
☰

Standards

Standards



BS EN ISO 56005:2021?



ASTM F2100-21?



IEC 60613:2010?

Standards

- Technical documents intended to establish common and repeated use of rules, conditions, guidelines, or characteristics for products or related processes and production methods and for related management systems practices

(US Department of Homeland Security, 2008, p.97)

In a standard

Problem definition-

- Mission needs statement
- Operational requirements document

Solution definition-

- Performance requirements
- Functional specifications
- Design specifications
- Material specifications

(p.11-12)

Search in Find@HKUL
<https://lib.hku.hk/>

See a list of popular standards databases
in subject guides
<https://libguides.lib.hku.hk/c.php?g=766195&p=5502325#s-lg-box-20781344>

British Standards Online

[http://find.lib.hku.hk/record=HKU_IZ61528
480080003414](http://find.lib.hku.hk/record=HKU_IZ61528480080003414)

- all British standards
- international and European standards that have been adopted as British standards

Demonstration

1. Browse standards related to
Food Technology

2. Search for standards related to
Innovation management



British Standards Online

Contact us +44 345 086 8037

Welcome The University of Hong Kong Logout

Home My Account Browse for Standards Help and FAQs E.g. BS 123 or valves Advanced Search

Browse by Module BSI, ISO and IEC Modules

ASTM Modules ASME Modules

Browse by Subject

FAQs

What is Browse? Can I browse BSOL by module? Can I browse BSOL by Subject or ICS code?

01 Documentation
02 Information & Finance
03 Vocabularies
04 Management, Law, Quality
05 Sciences & Health Care
06 Environment, Wastes

Browse

Standards

British Standards Online

The screenshot shows the BSOL homepage with a search bar containing 'innovation'. The search results page displays 18 results, with the first two listed:

- BS EN ISO 56005:2021**
Innovation management. Tools and methods for intellectual property management. Guidance. View details
Status: Current | Published 03/12/2020
- 20/30357558 DC**
BS ISO 56006. Innovation management. Tools and methods for strategic intelligence management. Guidance. View details
Status: Current, Draft for public comment | Published 10/08/2020

On the right side of the results page, there is a yellow callout box with the word 'Search' in bold black text.

Key UI elements visible include:

- bsi. BSOL Standards Online** logo
- Contact us +44 345 086 8037**
- Welcome The University of Hong Kong Logout**
- Innovation Advanced Search** button (highlighted with a yellow box)
- New Search** and **Search within results** filters
- Remove terms from filter** (with 'innovation' checked)
- Only show results within my...** checkbox
- Sort by** and **Items per page** dropdowns
- IN YOUR SUBSCRIPTION** badge with a download icon (highlighted with a yellow box)

British Standards Online

ISO 56005:2020

EN ISO 56005:2021

- approved by European Committee for Standardization (CEN) without any modification
- exists in three official versions (English, French, German)

UK implementation

**BS EN ISO
56005:2021
Innovation
management.**

ASTM International

[http://find.lib.hku.hk/record=HKU_IZ61525
611260003414](http://find.lib.hku.hk/record=HKU_IZ61525611260003414)

- 12,500+ standards for quality and testing
- developed by ASTM International
(formerly known as American Society for Testing and Materials)

Demonstration

1. Browse standards related to
construction
2. Search for standards related to
medical face masks



Standards

ASTM International

The screenshot shows the ASTM International COMPASS website interface. A yellow box highlights the "Menu" button in the top left corner. The main navigation bar includes "EN", "Help", and "Sign In/Register". A search bar at the top right contains the placeholder "Search keyword(s), designation, author" with a magnifying glass icon.

The left sidebar has a "Close" button and three main sections: "Home", "Subscriptions", and "Technical Committees". The "Subscriptions" section is currently active, with a yellow box highlighting the "ASTM" link under it. The "Technical Committees" section has a blue arrow icon indicating it can be expanded.

The main content area features the ASTM International logo and several navigation links. A yellow box highlights the "Book of Standards" link. Below it are "Research Reports", "Section 03: Metals Test Methods and Analytical Procedures", "Section 11: Water and Environmental Test Methods", and "Section 04: Construction". A large yellow box labeled "Browse" covers the bottom right corner of the page.

Standards

≡

ASTM International

The screenshot shows the ASTM COMPASS website interface. At the top left is the 'Menu' icon. In the center is the 'ASTM COMPASS' logo. On the right are language ('EN'), help ('Help'), and user ('Sign In/Register') buttons. Below the header is a search bar with the text 'medical masks' and a magnifying glass icon. A yellow box highlights this search bar. To the left is a sidebar with 'Show:' dropdown set to '25' and 'Sort By:' dropdown set to 'Best Match'. It also includes 'Refine Your Results' and 'Clear All' buttons, and dropdowns for 'Document type' and 'Publisher' (with options for ASTM, AASHTO, and 'See More'). The main content area shows search results for 'medical masks'. At the top of the results is a card for 'F2100-21 Standard Specification for Performance of Materials Used in Medical Face Masks'. This card includes 'Last Updated: Aug 10, 2021', language ('English'), and 'Other Versions'. A yellow box highlights this card. Below the card is a snippet of the specification: '1.1 This specification covers testing and requirements for materials used in the construction of medical face masks'. A 'Show More' link is visible. A large yellow callout bubble in the bottom right corner contains the word 'Search'.

All

medical masks

Show: Sort By:
25 Best Match

Refine Your Results Clear All

Document type

Publisher
 ASTM 141367
 AASHTO 5
[See More](#)

Standard
ASTM
Active

Last Updated: Aug 10, 2021 | English | Other Versions

F2100-21
Standard Specification for Performance of Materials
Used in Medical Face Masks

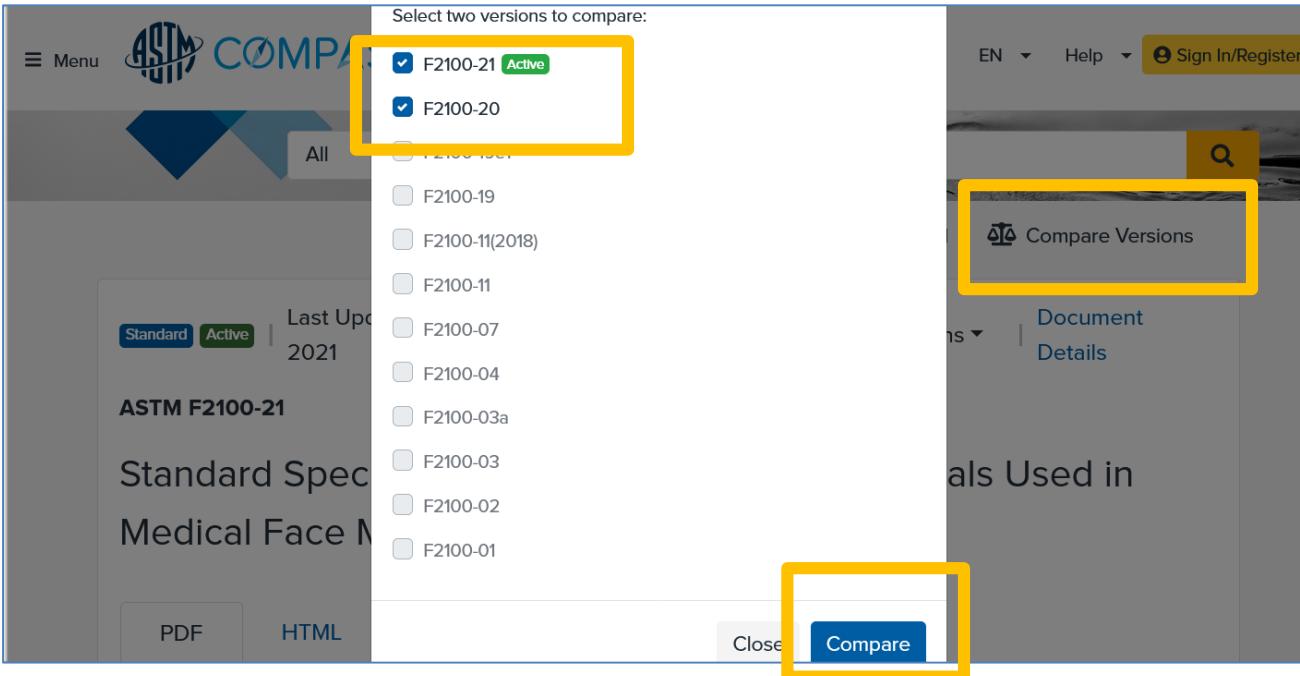
1.1 This specification covers testing and requirements for materials used in the construction of medical face masks

Show More

Search

Standards

ASTM International



Compare versions

ASME Standards Collection

http://find.lib.hku.hk/record=HKU_IZ61553051130003414

- 871 standards in Complete ASME Codes & Standards Collection
- 103 standards in BPVC Boiler and Pressure Vessel Code Complete Set
- 768 standards in Non-Boiler and Pressure Vessel Code Complete Set

ASME Standards Collection

Demonstration

1. Search for standards related to boilers



ASME Standards Collection

Sign in:

User ID Password 

or

Click here to access via institutional account

Search

boiler

Document Number Text 

Search inside: Title Title and Abstract Full Text

Search

ASME Standards Collection

The screenshot shows the ASME Standards Collection website. At the top, there is a navigation bar with the ASME logo, 'STANDARDS COLLECTION', 'THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS', 'Sign-Out', 'Home', 'My Account', 'Tools' (which is highlighted with a yellow box), and 'Help'. Below the navigation bar, there is a large blue button with a gear icon labeled 'Clear' and a printer icon labeled 'Print' (also highlighted with a yellow box). A banner at the bottom of the page reads 'ASME BPVC.II.C 2021' on the left and 'ASME BPVC.II.C-2021' on the right. A modal window titled 'Generate Printer Friendly Output' is open. It contains the text 'Selected Item: ASME BPVC.VII 2021'. Inside a yellow-bordered box, there are 'Options:' dropdown menus showing '1. Selected items only' and 'Pages: From 41 To 50'. A note below says 'Note: Limit maximum 50 pages at a time.' At the bottom of the modal is a 'Submit' button. To the right of the modal, a large yellow button with the word 'Print' in black text is visible.

ASME STANDARDS COLLECTION
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

Sign-Out Home My Account Tools Help

Clear Print

ASME BPVC.II.C 2021 ASME BPVC.II.C-2021

Generate Printer Friendly Output

Selected Item:
ASME BPVC.VII 2021

Options:

1. Selected items only

Pages: From 41 To 50

Note: Limit maximum 50 pages at a time.

Submit

Print

IEC Library Server

[http://find.lib.hku.hk/record=HKU_IZ61547
961250003414](http://find.lib.hku.hk/record=HKU_IZ61547961250003414)

- 12,481 standards for electrical, electronic and related technologies
- by International Electrotechnical Commission

Demonstration

1. Search for standards related to X-ray



IEC Library Server

1 - 1 of 1

Resource available at: [IEC library server](#) ↗

HIDE LICENSE ↗

Public notes:

[Obtain username and password](#) ↗

License Terms

Walk in User Note: Current HKU staff and students only

Concurrent User: 1

Authorized remote access: Current HKU staff and students

Sign in

IEC Library Server

The screenshot shows the IEC Products & Services Portal interface. At the top, there is a navigation bar with the IEC logo, a search bar containing 'x-ray', and user account information. Below the navigation bar, the search results for 'IEC 62495:2011' are displayed. On the left, a table of contents lists various sections of the standard. In the center, the title page of IEC 62495 is shown, featuring the IEC logo, the title 'INTERNATIONAL STANDARD', the edition 'Edition 1.0 2011-04', and several circular icons. A yellow box highlights the search bar, and another yellow box highlights the 'i' icon on the title page's sidebar.

Products & Services Portal
International Electrotechnical Commission

Publications **x-ray**

IEC 62495:2011

Search | Automatic Zoom

CONTENTS

FOREWORD

1 Scope and object

2 Normative references

3 Terms and definitions

4 General requirements

- 4.1 System description
- 4.2 Safety considerations
- 4.3 Other requirements
- 4.4 Training

5 Portable XRF analysis system requirements

IEC 62495

Edition 1.0 2011-04

INTERNATIONAL STANDARD

i

Search

Search

Standards



HKU Libraries. (2021). Finding standards databases.
<https://youtu.be/zIGKnMjJFtY?t=1>



☰

Patents

Patents

- A government grant to an inventor of the right to exclude others from making, using, or selling an invention, usually for a limited period
- for new and useful machines, manufactured products, and industrial processes and for significant improvements of existing ones;
- for new chemical compounds, foods, and medicinal products, the processes used to produce them.
- In some countries, for new forms of plant or animal life developed through genetic engineering.

Why search for patents

- To discover a significant amount of unique and valuable technological information not available except in patents
- To gain a comprehensive overview of a product or technology
- To identify prior art when considering filing a patent application
- To identify patents before making, using or selling a product
- To assess gaps of patent protection in an industry or comparing patent portfolios between competitors

The screenshot shows a video player interface. On the left is a black vertical bar. The main content area has a white background with a dark grey footer bar. At the top, the title "Patents: An Introduction" is displayed in large, bold, black font. Below it, two questions are listed: "Why search for patents?" and "What is a patent?". A small play button icon is positioned between these questions. In the center, there is a technical drawing of a device with various parts labeled with letters like A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z. Below the drawing, the text "US Patent #2,415,012" is visible. To the right of the drawing is a circular icon containing a square with a diagonal line through it, likely a closed caption or subtitle icon. The footer bar contains several icons: a play button, a volume icon, a timestamp "0:04 / 5:21", the MIT Libraries logo, and standard video control icons for full screen, settings, and other functions.

MIT Libraries. (2018). Why search for patents? What is a patent?
Patent Searching Basics.
<https://techtv.mit.edu/videos/d92431f927fb4af98c9ce7050765afea/>

See a list of popular patents databases in subject guides

[https://libguides.lib.hku.hk/c.php?g=766195
&p=5502325#s-lg-box-21715188](https://libguides.lib.hku.hk/c.php?g=766195&p=5502325#s-lg-box-21715188)

Derwent Innovations Index

http://find.lib.hku.hk/record=HKU_IZ61509955120003414

- 82.8M+ individual patent documents
- from 59 patent issuing authorities
- titles and abstracts written in plain English to aid searching across patents issued in other languages

Derwent Innovations Index

Demonstration

1. Search patents by

International Patent Classification (IPC) code

2. Search patents by

topic



Derwent Innovations Index

International Patent Classification (IPC) system

- dividing all areas of technology into eight sections (A–H)
- the sections subdivided by notations for class, subclass, group and subgroup

Example: An IPC code assigned to an athletic shoe

SECTION A — HUMAN NECESSITIES

| | |
|------------|--|
| A43 | FOOTWEAR |
| A43B | characteristic features of footwear; parts of footwear |
| A43B 13/00 | Soles; Sole and heel units |
| A43B 13/14 | · characterized by the constructive form |



Derwent Innovations Index

DOCUMENTS CITED PATENT SEARCH

International Patent Classification ▾

Add row Add data range ...

- > SECTION A - HUMAN NECESSITIES
- > SECTION B - PERFORMING OPERATIONS ; TRANSPORTING
- > SECTION C - CHEMISTRY; METALLURGY
- > SECTION D - TEXTILES; PAPER
- > SECTION E - FIXED CONSTRUCTIONS
- > SECTION F - MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
 - > F01 MACHINES OR ENGINES IN GENERAL ⓘ ; ENGINE PLANTS IN GENERAL ; STEAM ENGINES
 - > F02 INTERNAL-COMBUSTION PISTON ENGINES ; COMBUSTION ENGINES IN GENERAL ⓘ
 - > F02C GAS-TURBINE PLANTS ; AIR INTAKES FOR JET-PROPELLION PLANTS ; CONTROLLING FUEL SUPPLY IN AIR-BREATHING JET-PROPELLION PLANTS ⓘ

F02D-041/00 REMOVE

Clear Search

Add to query

IPC code

Derwent Innovations Index

Effective keyword search

- exhaustive usage of synonyms, e.g. shoes and footwear
- effective use of Boolean operators
- appropriate clustering of concepts into discrete search queries
- combining and modifying previous search queries appropriately

Derwent Innovations Index

Search in: Derwent Innovations Index ▾

DOCUMENTS CITED PATENT SEARCH

Topic "iso e super" X

(+) And Topic production or manufacturing X

+ Add row + Add date range Advanced Search

X Clear Search

Topic

Derwent Innovations Index

Refine results

Search within results for... 

Subject Areas 

Assignee Names 

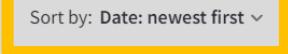
Assignee Codes 

Inventors 

IPC Codes 

Derwent Class Codes 

Derwent Manual Codes 

0/17,548 [Add To Marked List](#) [Export](#)  Sort by: Date: newest first  1 of 351 >

1 System for reducing harmful emissions from internal combustion engine, has controller for activating aftertreatment system heater to heat exhaust gas in response to determining that engine operating condition is not met
WO2021242228-A1
Inventor(s) : [LIGHT-HOLETS J K](#); [KOLHOUSE J S](#); (...); [BRAHM A](#)
Assignee(s) : [CUMMINS INC](#) and [TULA TECHNOLOGY INC](#)
Derwent Primary Accession Number :
2021-D9431E
[Download original](#) 

2 Internal combustion engine system for vehicle, has controller which opens recirculation flow control valve to motoring recirculation condition and intake valve to motoring intake condition if motoring condition is determined
WO2021243209-A1; US2021372336-A1

Sort & Refine

Derwent Innovations Index

[Download original](#) [Export](#)

System for reducing harmful emissions from internal combustion engine, has controller for activating aftertreatment system heater to heat exhaust gas in response to determining that engine operating condition is not met

 [Chemical Information](#)

Patent Number: WO2021242228-A1

Inventors: LIGHT-HOLETS J K; KOLHOUSE J S; NELSON C R; PURI A; SONG X; BRAHM A

Patent Assignees:

CUMMINS INC(CUND-C)
TULA TECHNOLOGY INC(TULA-Non-standard)

Derwent Primary Accession Number: 2021-D9431E

Abstract:

NOVELTY - The system has an aftertreatment system heater (110) coupled to an engine (102). A controller (122) is coupled to the aftertreatment system heater. The controller determines the condition of the exhaust gas from the engine, and compares the condition of the exhaust gas to a predefined threshold. If the condition of the exhaust

[Expand to show full abstract](#)

Documentation Abstract: [WO2021242228\(A1\)](#)

Images: 6 [\(click to view\)](#)

International Patent Classification: F02D-017/00 Controlling engines by cutting-out individual
Rendering engines inoperative or idling INFO 7936; F01N-003/00 Exhaust or silencing apparatus

Read & Download

Scopus

[http://find.lib.hku.hk/record=HKU_IZ61518
360550003414](http://find.lib.hku.hk/record=HKU_IZ61518360550003414)

- 44M+ patent records
- from five patent offices:
 - World Intellectual Property Organization (WIPO)
 - European Patent Office (EPO)
 - US Patent Office (USPTO)
 - Japanese Patent Office (JPO)
 - UK Intellectual Property Office (IPO.GOV.UK)

Demonstration

1. Search patents by topic





Scopus

The screenshot shows the Scopus search interface. At the top, there are three tabs: 'Documents' (selected), 'Authors', and 'Affiliations'. To the right is a 'Search tips' link. Below the tabs, there are two main search input fields. The first field, 'Search within' (Article title, Abstract, Keywords), has a dropdown arrow and is highlighted with a yellow box. The second field, 'Search documents *' (containing the query "iso-e-super" (degradation or perishing)), is also highlighted with a yellow box. Below these fields are buttons for 'Add search field', 'Add date range', and 'Advanced document search'. To the right are 'Reset' and 'Search' buttons, the latter being highlighted with a yellow box. At the bottom, there is a 'Refine results' section with a 'Search within results...' input field and a magnifying glass icon. There are three tabs for refining results: 'Documents' (selected), 'Secondary documents', and 'Patents', the latter of which is highlighted with a yellow box. To the right of the tabs is a 'Sort on:' dropdown set to 'Date (newest)'.

Topic

Scopus

The screenshot shows the Scopus Patents search results for the keyword "JASMOL". The results are displayed in a table with columns: Patent name, Inventor(s)/applicant(s), Year, Patent office, and Patent number.

Search within results... (with a magnifying glass icon)

Refine results

Limit to **Exclude**

Year

| Year | Count |
|-------------------------------|-------|
| <input type="checkbox"/> 2021 | (50) |
| <input type="checkbox"/> 2020 | (63) |
| <input type="checkbox"/> 2019 | (93) |
| <input type="checkbox"/> 2018 | (91) |
| <input type="checkbox"/> 2017 | (86) |

Documents **Secondary documents** **Patents**

Sort on: [Date \(newest\)](#) (with a dropdown arrow icon)

Show all information

| Patent name | Inventor(s)/applicant(s) | Year | Patent office | Patent number |
|-------------|---|------|--|---------------|
| 1 JASMOL | SCHULZE, Nicole; FINKE, Anja; PESARO, Manuel(...) (SYMRISE AG) | 2021 | United States Patent and Trademark Office Pre-Granted Publication | US20210403830 |

[Show more information](#) ▾ LexisNexis

Sort & Refine

SciFinder

http://find.lib.hku.hk/record=HKU_IZ61508680780003414

- patents in chemistry
- patent publications from 9 major patenting authorities
- allows Markush structure (generic structure to patent multiple compounds) search

CNKI (China National Knowledge Infrastructure)

中国专利数据库

http://find.lib.hku.hk/record=HKU_IZ61477611320003414

- 38.6M+ patent records
- from 1985



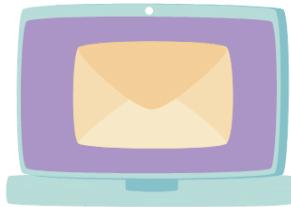
Conclusion

After this session, you should be able to:

- have a basic understanding about standards and patents,
- know various standards and patents databases subscribed by the Libraries, and
- find various standards and patents within some key databases.



Ask a librarian



<https://lib.hku.hk/general/help.html>