



# BASICS OF PATENT SEARCHING

(Patentability vs Validity vs Freedom to Operate vs Mapping)

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**SINGHANIA & PARTNERS** LLP  
SOLICITORS AND ADVOCATES

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1) Defining Prior Art

2) Types of Patent Search

3) Key Concepts in Searching

4) Relevant Searching Tools or Database

5) Using Search Tools or Database

# Defining Prior Art

The information already available in the public domain through publication, both oral or written, prior to the effective date or the earliest date of filing of the invention claimed in the patent application.

Any public document or disclosure such as published patent literature and non-patent literature (books/ journals/ research papers/ websites/ marketing information/ traditional knowledge or alike) constitutes Prior Art.

# Types of Patent Search

## Patentability Search or Novelty Search

- Conducted before filing of the patent application for the proposed invention;
- To ascertain if the proposed invention is new/novel;
- Advantages: claim drafting; strengthen the scope of patent; determine potential of the invention.

## Freedom-to-Operate Search or Clearance Search

- Conducted before the commercialization of products in the market;
- To ascertain if an enterprise is free to operate and commercialize the product without infringing upon the active patents or pending patents in a jurisdiction;
- Advantages: due diligence process; risk assessment analysis; plan commercializing strategies; licensing negotiations.

# Types of Patent Search

## Invalidity Search or Opposition Search

- Conducted to identify the references, patent or non-patent, which may impact and control the validity and enforceability of the patented claims;
- To ascertain novelty and inventive step of claims in a patent infringement suit or any other legal proceedings; evaluate strength of the patented claims; to initiate opposition proceedings;
- Advantages: block the infringing patents; establish solidity/monopoly of a patent portfolio; licensing.

## State of the Art Search or Patent Landscape Search

- Conducted to have comprehensive view of a technology;
- Advantages: assessing technology trends and potential competitors and determine and strategizing research strategies; investments and acquisitions.

# Key Concepts in Searching

Defining concepts of the invention

Identifying essential features and  
embodiments of the invention

Keyword search/ Search Strings/ IPC

Identifying  
databases and  
jurisdictions

Using wildcards

Classifying the  
invention

Filtering relevant  
results

# Relevant Searching Tools or Databases

## Unpaid Databases

- InPASS
- USPTO Database
- Espacenet
- Patentscope
- Patent Lens
- Free Patents Online
- Google Patents

## Paid Databases

- Derwent World Patents Index
- Questel Orbit
- PatBase
- Patseer
- Thomson Reuters
- PubChem
- ChemSpider
- PubMed

# Using Search Tools or Databases



Microsoft

Include non-patent literature (Google Scholar)

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Microsoft

- Microsoft;
- Assignee: Microsoft;

Search and read the full text of patents from around the world.



# Using Search Tools or Databases

SEARCH TERMS ? ×

+ Synonym

SEARCH FIELDS

Date · Priority ▼  
YYYY-MM-DD — YYYY-MM-DD

+ Inventor

Microsoft × or + Assignee

Patent Office ▼ Language ▼

Status ▼ Type ▼

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## Intelligent video summaries in information access



WO US GB NO · US9122754B2 · Bjorn Olstad · Microsoft International Holdings B.V.

Priority 2005-10-19 · Filed 2012-10-22 · Granted 2015-09-01 · Published 2015-09-01

In a method for displaying video data within result presentations in information access or search systems, compressed thumbnails are computed for videos in a result page and applied to the result page. An end user is enabled to select a video in the result page and activate streaming of a video ...

## Touchscreen Testing

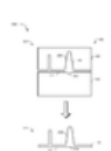


US CN · US20150160781A1 · Aleksandar Uzelac · Microsoft Microsoft Technology Licensing, LLC

Priority 2011-01-24 · Filed 2015-02-12 · Published 2015-06-11

Touchscreen testing techniques are described. In one or more implementations, a conductor is placed proximal to a touchscreen device and the touchscreen device is tested by simulating a touch of a user by placing the conductor in a grounded state and lack of a touch by the user by placing the ...

## Metal alloy injection molding protrusions

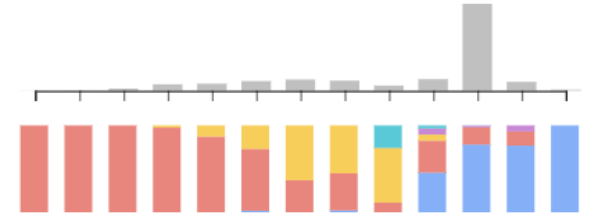


WO EP US CN · US8991473B2 · Paul C. Bornemann · Microsoft Technology Holding, LLC

Priority 2012-10-17 · Filed 2014-02-10 · Granted 2015-03-31 · Published 2015-03-31

Metal alloy injection molding techniques are described. In one or more implementations, these techniques may also include adjustment of injection pressure, configuration of runners, and/or use of vacuum pressure, and so on to encourage flow of the metal alloy through a mold. Techniques are also ...

### Top 1000 results by filing date



### Relative count of top 5 values

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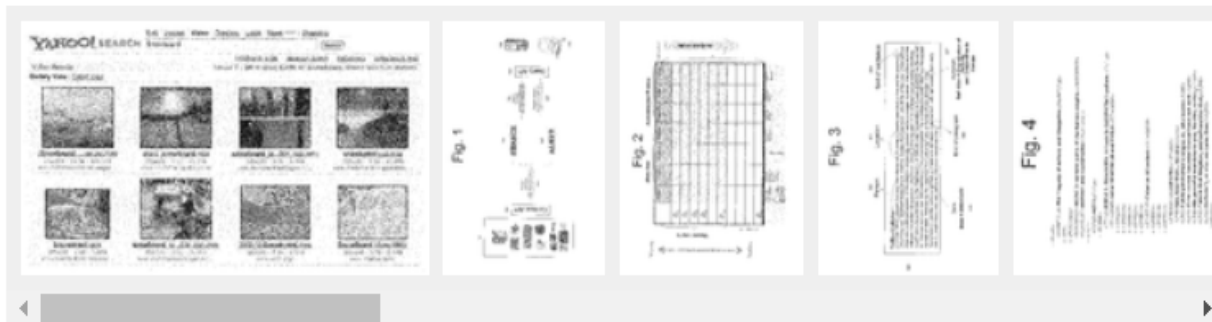
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## Intelligent video summaries in information access

### Abstract

In a method for displaying video data within result presentations in information access or search systems, compressed thumbnails are computed for videos in a result page and applied to the result page. An end user is enabled to select a video in the result page and activate streaming of a video summary within the context of the associated result page.

### Images (18)



### Classifications

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**US9122754B2**

United States

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Inventor: [Bjorn Olstad](#), [Will Arentz](#)

**Current Assignee** : [Microsoft Corp](#)

### Worldwide applications

2005 • [NO](#) 2006 • [US](#) [GB](#) [WO](#) 2012 • [US](#) 2015 • [US](#)

### Application US13/657,573 events

2005-10-19 • Priority to NO20054844

2012-10-22 • Application filed by Microsoft International Holdings BV

2013-05-23 • Publication of US20130132374A1

2015-09-01 • Application granted

2015-09-01 • Publication of US9122754B2

# Using Search Tools or Database

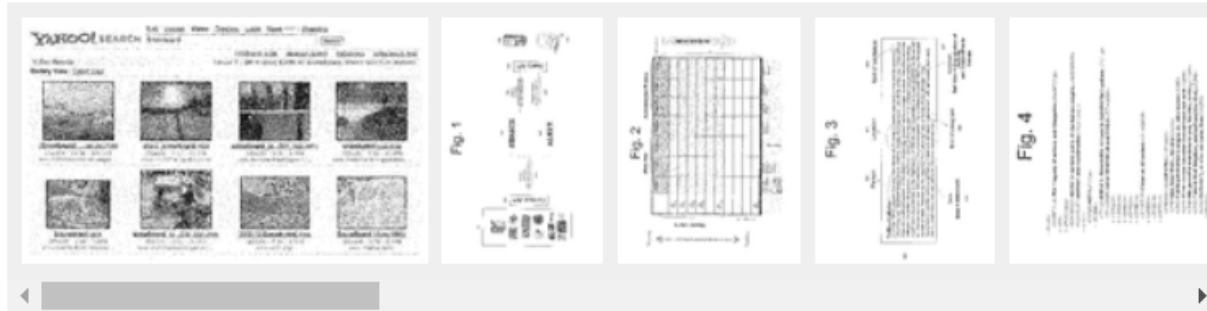
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## Intelligent video summaries in information access

### Abstract

In a method for displaying video data within result presentations in information access or search systems, compressed thumbnails are computed for videos in a result page and applied to the result page. An end user is enabled to select a video in the result page and activate streaming of a video summary within the context of the associated result page.

### Images (18)



### Classifications

■ [G06F16/738](#) Presentation of query results

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**US9122754B2**

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**Inventor:** [Bjorn Olstad](#), [Will Arentz](#)

**Current Assignee:** [Microsoft Corp](#)

### Worldwide applications

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Application [US13/657,573](#) events ⓘ

2005-10-19 • Priority to [NO20054844](#)

2012-10-22 • Application filed by [Microsoft International Holdings BV](#)

2013-05-23 • Publication of [US20130132374A1](#)

2015-09-01 • Application granted

2015-09-01 • Publication of [US9122754B2](#)

# Using Search Tools or Database



Patent Search

Patent Search | Patent E-register | Application Status | Help

Publication Type:  Published  Granted

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From: mm/dd/yyyy To: mm/dd/yyyy

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Please Enter Patent Number: e.g. 236542

Please Enter Applicant Name: e.g. SRM Institute of Science and Technology

Publication Type:  Published

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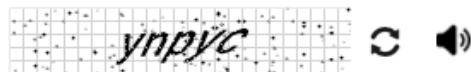
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# Using Search Tools or Databases

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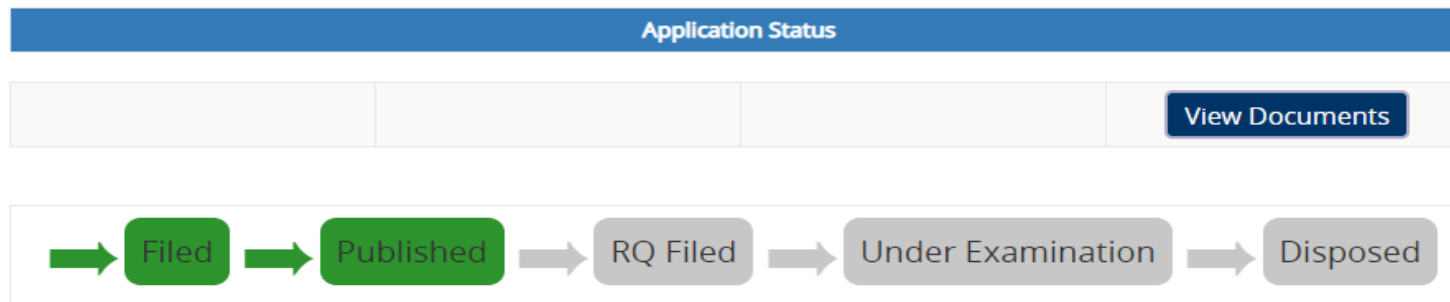
Application Number	Title	Application Date	Status	
202147012589	ENHANCED ANCHOR PROTOCOL FOR EVENT STREAM PROCESSING	23/03/2021	Published	<a href="#">Application Status</a>
202147012590	LCD DISPLAY BACKLIGHT CONTROL SYSTEM	23/03/2021	Published	<a href="#">Application Status</a>
202147011469	INVOKING APPLICATION PROGRAMMING INTERFACES ACROSS ISOLATED PARTS OF A WEB APPLICATION	18/03/2021	Published	<a href="#">Application Status</a>
202147011371	CONNECTED APPLICATION EXPERIENCE	17/03/2021	Published	<a href="#">Application Status</a>
202147011248	DETECTION OF CODE DEFECTS VIA ANALYSIS OF TELEMETRY DATA ACROSS INTERNAL VALIDATION RINGS	17/03/2021	Published	<a href="#">Application Status</a>
202147011253	SURFACING SELECT ELECTRONIC MESSAGES IN COMPUTING SYSTEMS	17/03/2021	Published	<a href="#">Application Status</a>
202147011351	CLOUD-BASED COMPOSABLE DATA LAYER	17/03/2021	Published	<a href="#">Application Status</a>
202147010984	METHODS FOR AUTOMATIC SELECTION OF DEGREES OF PARALLELISM FOR EFFICIENT EXECUTION OF QUERIES IN A DATABASE SYSTEM	15/03/2021	Published	<a href="#">Application Status</a>
202147010613	FUZZY INCLUSION BASED IMPERSONATION DETECTION	12/03/2021	Published	<a href="#">Application Status</a>
202147010615	IMPLEMENTING A GRAPHICAL OVERLAY FOR A STREAMING GAME BASED ON CURRENT GAME SCENARIO	12/03/2021	Published	<a href="#">Application Status</a>
202147010614	ELASTIC RESOURCE POOLING FOR DYNAMIC THROUGHPUT REBALANCING	12/03/2021	Published	<a href="#">Application Status</a>
202147010131	ACCESSING PRIOR STORAGE SEGMENT SERVER STATE	10/03/2021	Published	<a href="#">Application Status</a>
202147007850	APPLYING A LOG TO STORAGE SEGMENTS	24/02/2021	Published	<a href="#">Application Status</a>
202147007455	SECURING SENSITIVE DATA USING DISTANCE-PRESERVING TRANSFORMATIONS	23/02/2021	Published	<a href="#">Application Status</a>

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InPASS Search Result

Patent Search	Patent E-register	Application Status	Help
Invention Title	ENHANCED ANCHOR PROTOCOL FOR EVENT STREAM PROCESSING		
Publication Number	13/2021		
Publication Date	26/03/2021		
Publication Type	INA		
Application Number	202147012589		
Application Filing Date	23/03/2021		
Priority Number	U.S.A.16/145456		
Priority Country	U.S.A.		
Priority Date	28/09/2018		
Field Of Invention	COMPUTER SCIENCE		
Classification (IPC)	G06F0009540000, G06Q0050220000, G06F0009500000, G06F0016930000, H04N0021472000		
Inventor			
Name	Address	Country	Nationality
ALPEROVICH, Alexander	Microsoft Technology Licensing, LLC One Microsoft Way Redmond, Washington 98052-6399	U.S.A.	U.S.A.
SHULMAN, Boris	Microsoft Technology Licensing, LLC One Microsoft Way Redmond, Washington 98052-6399	U.S.A.	U.S.A.
CHEN, Zhong	Microsoft Technology Licensing, LLC One Microsoft Way Redmond, Washington 98052-6399	U.S.A.	U.S.A.
NOVIK, Lev	Microsoft Technology Licensing, LLC One Microsoft Way Redmond, Washington 98052-6399	U.S.A.	U.S.A.
ZORYN, Kanstantsyn	Microsoft Technology Licensing, LLC One Microsoft Way Redmond, Washington 98052-6399	U.S.A.	U.S.A.
Applicant			
Name	Address	Country	Nationality
MICROSOFT TECHNOLOGY LICENSING, LLC	One Microsoft Way Redmond, Washington 98052-6399	U.S.A.	U.S.A.
<b>Abstract:</b>			
Described herein is a system and method for startup and/or recovery for stream processing. During a startup phase: start anchor request(s), each identifying a particular time, are accumulated until request(s) are pending from downstream nodes. A minimum time of the accumulated start anchor request(s) is determined. If the processing system is an			

Application Details	
APPLICATION NUMBER	202147012589
APPLICATION TYPE	PCT NATIONAL PHASE APPLICATION
DATE OF FILING	23/03/2021
APPLICANT NAME	<b>MICROSOFT TECHNOLOGY LICENSING, LLC</b>
TITLE OF INVENTION	ENHANCED ANCHOR PROTOCOL FOR EVENT STREAM PROCESSING
FIELD OF INVENTION	COMPUTER SCIENCE
ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PCT INTERNATIONAL APPLICATION NUMBER	PCT/US2019/039108
PCT INTERNATIONAL FILING DATE	26/06/2019
PRIORITY DATE	28/09/2018
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	26/03/2021





# Using Search Tools or Databases

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Classification search

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1. Embedded interaction code printing with Microsoft Office doc

US7532366B1 • 2009-05-12 • MICROSOFT CORP [US]

**Earliest priority: 2005-02-25 • Earliest publication: 2009-05-12**

... conjunction with different applications that include Microsoft Word, Microsoft InfoPath(TM). With a Microsoft Word document... are printed. With a Microsoft PowerPoint(R) document, each page is printed with a selected number of slides and with... Microsoft InfoPath(TM) document, an HTML document is

2. Broadcasting drive method for microsoft media center and module thereof

CN101729171A • 2010-06-09 • YUAN HIGH TECH DEV CO LTD

**Earliest priority: 2008-10-10 • Earliest publication: 2010-06-09**

...The invention relates to a broadcasting drive method for a microsoft media center and a module thereof; the broadcasting drive method for the microsoft media center at least comprises a broadcasting channel regulator, a broadcasting voice frequency regulator, a broadcasting... generating a virtual image signal to lead the microsoft

3. Portable microsoft operation system account method

CN101625646A • 2010-01-13 • RUIHONG TECHNOLOGY CO LTD

**Earliest priority: 2009-07-31 • Earliest publication: 2010-01-13**

The invention relates to a portable microsoft operation system account method which belongs to electronics. A user

- Relevance
- ↓ Priority date
- ↑ Priority date
- ↓ Publication date
- ↑ Publication date

☆ US7532366B1 Embedded interaction code printing with Microsoft Office documents

Patent Translate

Bibliographic data

Global Dossier

Applicants MICROSOFT CORP [US] +

Inventors LIU YOUJUN [CN]; WANG JIAN [CN]; WU JIANG [CN]; YANG HONGYUN [CN] +

Classifications

IPC H04N1/40;

CPC G06F3/1208 (EP); G06F3/1244 (EP); G06F3/1285 (EP); H04N2201/3245 (EP); H04N2201/3271 (EP); H04N2201/3274 (EP);

Priorities US6719305A·2005-02-25

Application US6719305A·2005-02-25

Publication US7532366B1·2009-05-12

Published as US7532366B1

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**AN/Microsoft:** 46027 patents.

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Refine Search

AN/Microsoft

	<b>PAT. NO.</b>	<b>Title</b>
1	<a href="#">D915,451</a>	<a href="#">Display screen with animated graphical user interface</a>
2	<a href="#">D915,274</a>	<a href="#">Charging case for controller</a>
3	<a href="#">10,972,735</a>	<a href="#">Use of chroma quantization parameter offsets in deblocking</a>
4	<a href="#">10,972,680</a>	<a href="#">Theme-based augmentation of photorepresentative view</a>
5	<a href="#">10,972,643</a>	<a href="#">Camera comprising an infrared illuminator and a liquid crystal optical filter switchable between a reflector and a transparent state</a>
6	<a href="#">10,972,614</a>	<a href="#">Systems and methods of audio notification upon state change</a>
7	<a href="#">10,972,563</a>	<a href="#">Out-of-network notifications of network-transmitted content items</a>
8	<a href="#">10,972,531</a>	<a href="#">Social media driven information interface</a>
9	<a href="#">10,972,510</a>	<a href="#">Media session between network endpoints</a>
10	<a href="#">10,972,507</a>	<a href="#">Content policy based notification of application users about malicious browser plugins</a>
11	<a href="#">10,972,506</a>	<a href="#">Policy enforcement for compute nodes</a>

**United States Patent  
Sullivan**

**10,972,735  
April 6, 2021**

Use of chroma quantization parameter offsets in deblocking

### Abstract

Innovations in use of chroma quantization parameter ("QP") offsets when determining a control parameter for deblock filtering. For example, as part of encoding, an encoder sets a picture-level chroma QP offset and slice-level chroma QP offset for encoding of a slice of a picture. The encoder also performs deblock filtering of at least part of the slice, where derivation of a control parameter considers only the picture-level chroma QP offset. The encoder outputs at least part of a bitstream including the encoded content. As part of decoding, a corresponding decoder sets a picture-level chroma QP offset and a slice-level chroma QP offset for decoding of a slice of a picture, but derivation of a control parameter for deblock filtering considers only the picture-level chroma QP offset.

**Inventors:** Sullivan; Gary J. (Bellevue, WA)

**Applicant:**

Name	City	State	Country	Type
------	------	-------	---------	------

~~Microsoft Technology Licensing, LLC Redmond, WA US~~

**Assignee:** Microsoft Technology Licensing, LLC (Redmond, WA)

**Family ID:** 1000005472335

**Appl. No.:** 16/833,215

**Filed:** March 27, 2020

### Prior Publication Data

# THANK YOU

For further queries, please connect with us at  
[bhawna@singhania.in](mailto:bhawna@singhania.in) or [ipp@singhania.in](mailto:ipp@singhania.in)