

FREEDOM TO OPERATE IN PRACTICE

Dr. Patrick Heckeler

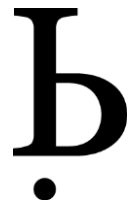
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IP.

FTO means managing risks



Balancing risk vs. budgetary constraints:

- You will never be able to “clear” a product or aspect of a product 100%
- You will never be certain that your search revealed all relevant documents
- Goal is to find the most efficient approach that will allow a satisfactory level of comfort with the risk involved, given the available time and information available

Note: Take into account both risk of infringement and validity



FTO process



1

- New product/process developed

2

- Should an FTO be performed?

3

- Determine search strategy and perform search

4

- Review the results

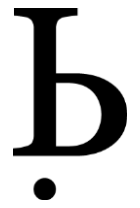
5

- Obtain any necessary opinions

6

- Decide whether to launch the new product/process

Essential questions



Why should you “clear” it?

- Plan to enter a new market?
- Competitors in the field? Are they aggressive?
- How long does it take to replace the critical feature?
- What are the costs of clearance?

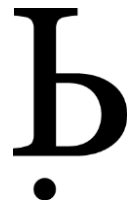


Who should clear it?

- R&D department?
- IP department?
- Outside patent firm/legal counsel?

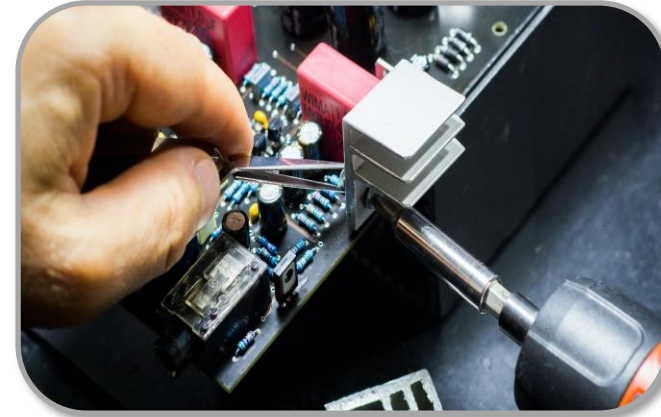


Essential questions



Which aspects do you need to “clear”?

- Which aspects should be considered?
- How does it differ from known products?
- Technical benefits?



Where do you need to “clear” it?

- Where will the product be sold?
- Where will it be manufactured?



FTO Search

b.

Topic/Title of the
presentation

Slide 6

Search specification

- A technical description of the product or process
 - which points should the search focus on?
- Geographic scope
- Key competitors, suppliers, or co-operation partners in the field
- Any relevant literature, designs, patents or applications

Who should perform the search?

- In-house technical expert/patent attorney?
- A search firm?
- A private practice patent firm?

To consider:

- Search expertise, language expertise
- Access to databases
- Passing on liability
- Speed, costs



Search filter criteria

IPC/CPC classifications

- The broader the search, the more expensive
- A narrower search might miss significant documents
- IPC: Older, less entries (used by WIPO)
- CPC: More entries, niches (cooperation between USPTO and EPO)

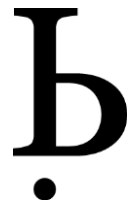
Keywords

- The more AND-connected keywords, the greater the risk, but the smaller the costs

Competitor Names

- Also consider affiliates / subsidiaries

Example – CPC Classification



Cooperative Patent Classification

Search for

View section

Index

[A](#)

[B](#)

[C](#)

[D](#)

[E](#)

[F](#)

[G](#)

[H](#)

[Y](#)



A »

Symbol	Classification and description		
<input type="checkbox"/> A	HUMAN NECESSITIES		
<input type="checkbox"/> B	PERFORMING OPERATIONS; TRANSPORTING		
<input type="checkbox"/> C	CHEMISTRY; METALLURGY		
<input type="checkbox"/> D	TEXTILES; PAPER		
<input type="checkbox"/> E	FIXED CONSTRUCTIONS		
<input type="checkbox"/> F	MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING		
<input type="checkbox"/> G	PHYSICS		
<input type="checkbox"/> H	ELECTRICITY		
<input type="checkbox"/> Y	GENERAL TAGGING OF NEW TECHNOLOGICAL DEVELOPMENTS; GENERAL TAGGING OF CROSS-SECTIONAL TECHNOLOGIES SPANNING OVER SEVERAL SECTIONS OF THE IPC; TECHNICAL SUBJECTS COVERED BY FORMER USPC CROSS-REFERENCE ART COLLECTIONS [XRACs] AND DIGESTS		

<https://worldwide.espacenet.com/classification?locale=en> EP

Example – CPC Classification



Cooperative Patent Classification

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« F99Z99/00 G01 »

Symbol	Classification and description	
<input type="checkbox"/> G	PHYSICS	
INSTRUMENTS		
<input type="checkbox"/> G01	MEASURING; TESTING	
<input type="checkbox"/> G02	OPTICS	
<input type="checkbox"/> G03	PHOTOGRAPHY; CINEMATOGRAPHY; ANALOGOUS TECHNIQUES USING WAVES OTHER THAN OPTICAL WAVES; ELECTROGRAPHY; HOLOGRAPHY	
<input type="checkbox"/> G04	HOROLOGY	
<input type="checkbox"/> G05	CONTROLLING; REGULATING	
<input type="checkbox"/> G06	COMPUTING; CALCULATING; COUNTING	
<input type="checkbox"/> G07	CHECKING-DEVICES	
<input type="checkbox"/> G08	SIGNALLING	

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Example – CPC Classification















<input type="checkbox"/>	G06	COMPUTING; CALCULATING; COUNTING	
<input type="checkbox"/>	G06C	DIGITAL COMPUTERS IN WHICH ALL THE COMPUTATION IS EFFECTED MECHANICALLY (score computers for card games A63F 1/18 ; construction of keys, printing mechanisms or other parts of general application to the typewriting or printing art B41 ; keys or printing mechanisms for special applications, <u>see</u> the relevant subclasses, e.g. G05G , G06K ; cash registers G07G 1/00)	   
<input type="checkbox"/>	G06D	DIGITAL FLUID-PRESSURE COMPUTING DEVICES	   
<input type="checkbox"/>	G06E	OPTICAL COMPUTING DEVICES; {COMPUTING DEVICES USING OTHER RADIATIONS WITH SIMILAR PROPERTIES} (optical logic elements <u>per se</u> G02F 3/00 ; digital storage using optical elements G11C 13/04)	  
<input type="checkbox"/>	G06F	ELECTRIC DIGITAL DATA PROCESSING (computer systems based on specific computational models G06N)	   
<input type="checkbox"/>	G06G	ANALOGUE COMPUTERS (analogue optical computing devices G06E 3/00)	  
<input type="checkbox"/>	G06J	HYBRID COMPUTING ARRANGEMENTS (optical hybrid computing devices G06E 3/00 ; {fuzzy computing G06N 7/02 }; neural networks for image data processing G06T ; analog/digital conversion, in general H03M 1/00)	   
<input type="checkbox"/>	G06K	GRAPHICAL DATA READING (image or video recognition or understanding G06V); PRESENTATION OF DATA; RECORD CARRIERS; HANDLING RECORD CARRIERS	   

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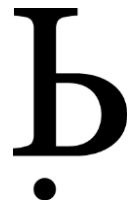
Example – CPC Classification



<input type="checkbox"/>	G06F	ELECTRIC DIGITAL DATA PROCESSING (computer systems based on specific computational models G06N)	   
▼ <input type="checkbox"/>	G06F 1/00	Details not covered by groups G06F 3/00 - G06F 13/00 and G06F 21/00 (architectures of general purpose stored program computers G06F 15/76)	
▼ <input type="checkbox"/>	G06F 3/00	Input arrangements for transferring data to be processed into a form capable of being handled by the computer; Output arrangements for transferring data from processing unit to output unit, e.g. interface arrangements	
▼ <input type="checkbox"/>	G06F 5/00	Methods or arrangements for data conversion without changing the order or content of the data handled	
▼ <input type="checkbox"/>	G06F 7/00	Methods or arrangements for processing data by operating upon the order or content of the data handled (logic circuits H03K 19/00)	
▼ <input type="checkbox"/>	G06F 8/00	Arrangements for software engineering (testing or debugging G06F 11/36 ; administrative, planning or organisation aspects of software project management G06Q 10/06)	
▼ <input type="checkbox"/>	G06F 9/00	Arrangements for program control, e.g. control units (program control for peripheral devices G06F 13/10)	
▼ <input type="checkbox"/>	G06F 11/00	Error detection; Error correction; Monitoring (error detection, correction or monitoring in information storage based on relative movement between record carrier and transducer G11B 20/18 ; monitoring, i.e. supervising the progress of recording or reproducing G11B 27/36 ; in static stores G11C 29/00)	 

https://worldwide.espacenet.com/classification?locale=en_EP

Example – CPC Classification



<input type="checkbox"/>	G06F 9/00	Arrangements for program control, e.g. control units (program control for peripheral devices <u>G06F 13/10</u>)	D
<input type="checkbox"/>	G06F 9/02	• using wired connections, e.g. plugboards	D
<input type="checkbox"/>	G06F 9/04	• using record carriers containing only program instructions (<u>G06F 9/06</u> takes precedence)	D
<input type="checkbox"/>	G06F 9/06	• using stored programs, i.e. using an internal store of processing equipment to receive or retain programs	D
<input type="checkbox"/>	G06F 9/22	•• Microcontrol or microprogram arrangements	D
<input type="checkbox"/>	G06F 9/223	••• {Execution means for microinstructions irrespective of the microinstruction function, e.g. decoding of microinstructions and nanoinstructions; timing of microinstructions; programmable logic arrays; delays and fan-out problems}	D
<input type="checkbox"/>	G06F 9/226	••• {Microinstruction function, e.g. input/output microinstruction; diagnostic microinstruction; microinstruction format}	D
<input type="checkbox"/>	G06F 9/24	••• Loading of the microprogram	D
<input type="checkbox"/>	G06F 9/26	••• Address formation of the next micro-instruction (<u>G06F 9/28</u> takes precedence){; Microprogram storage or retrieval arrangements}	D
<input type="checkbox"/>	G06F 9/261	•••• {Microinstruction address formation}	D

https://worldwide.espacenet.com/classification?locale=en_EP

Checking status and presenting the search results



	Publication No.	Owner	Earliest priority date (ddmmyy)	Status	Related Cases
D1	EP12345687	Company A	29/03/1999	In force GB	EP12345678 (Divisional withdrawn)
D2	EP98765432	Company B	29/03/1999	All states Designated	FR12345679 (withdrawn)
D3	EP55566678	Company C	15/03/1999	In force FR, DE, GB	No other EP family members

Infringement Analysis

b.

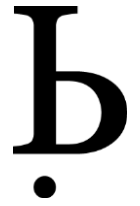
Topic/Title of the presentation

Slide 16

Infringement analysis

- Claim construction
- Application
- Doctrine of equivalents

Infringement analysis



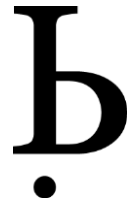
Determining infringement

Step 1 – **claim construction**: define the meaning of the features of the claim in an abstract manner (even though also with a view to the client's product or process)

Step 2 – **application**: check whether the client's product or process realizes each and every feature of the claim as construed in step 1 ("literal infringement")

Step 3 – **Doctrine of Equivalents**: if there is no literal infringement, check if the client's product or process is from a legal point of view equivalent to the invention as claimed

Rules of claim construction



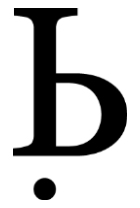
Art. 69(1) EPC, first sentence:

The extent of the protection conferred by a European patent or a European patent application shall be determined by the claims

→ No protection for subject-matter only disclosed in the description/drawings

→ On the flip side: (features of) preferred embodiment(s) in the description or drawings do not limit a broad, abstract claim

Rules of claim construction



Art. 69(1) EPC, second sentence

Nevertheless, the description and drawings shall be used to interpret the claims.

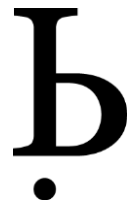
- All claims must be construed by means of the description/drawings
- Even apparently clear features
- This is because patentee is his own lexicographer
 - Starting point: ordinary meaning of a term in the art
 - But patent may use the term differently
 - Patent may provide a definition for a term
 - Patent may create a new term

Rules of claim construction

Apparatus “for” and features defined by their function

- Apparatus “for” X is a limitation only in the sense that the apparatus must be suitable for X
 - Example (EPO Guidelines F-IV 4.13.1): “Mould for molten steel”
 - The same is true for similar formulations, e.g. “ski stick” = stick suitable for skiing
 - If the apparatus is (theoretically) suitable for X, infringement even if defendant recommends not to use the accused product for X
 - The same is true for a feature defined by its function: the feature only has to be suitable for performing the function. It is irrelevant if the function is actually used in the country of the patent

Rules of claim construction



Method “for” and method defined by their function

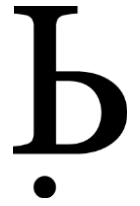
- EPO Guidelines F IV 4.13: in contrast to apparatus claim, method claims like “method for remelting galvanic layers” should not only be understood such that the method is suitable for remelting galvanic layers, but remelting of galvanic layers is understood to be one step of the method
- This may be different in Germany: Method for supporting imaging for navigation of a medical instrument inserted into a hollow organ of a human or animal body
 - Underlined part was found to be not limiting (BGH GRUR 2010, 1081)

Rules of claim construction

Other rules

- Optional features have no limiting effect (EPO Guidelines F IV 4.9)
 - E.g. “in particular”
- “Comprising” v. “consisting” (EPO Guidelines F IV 4.21)
- Also numbers mentioned in the claim are subject to construction
 - E.g., “10” may comprise the range between 9.5 and 10.5

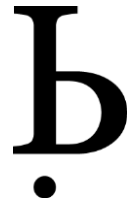
Application



All elements rule

- An accused product/process is within the scope of the claim if it realizes each and every feature of the claim
- Even if only one feature is not realized, there is no infringement
 - This is true even the skilled person recognizes that the missing element(s) are not needed for the realization of the inventive idea
 - But an element of the accused embodiment may realize more than one claim feature
- If independent claim is realized, normally no need to check realization of dependent claims
 - But dependent claims may serve as fallback positions in case the independent claims are invalid

Application



Irrelevant

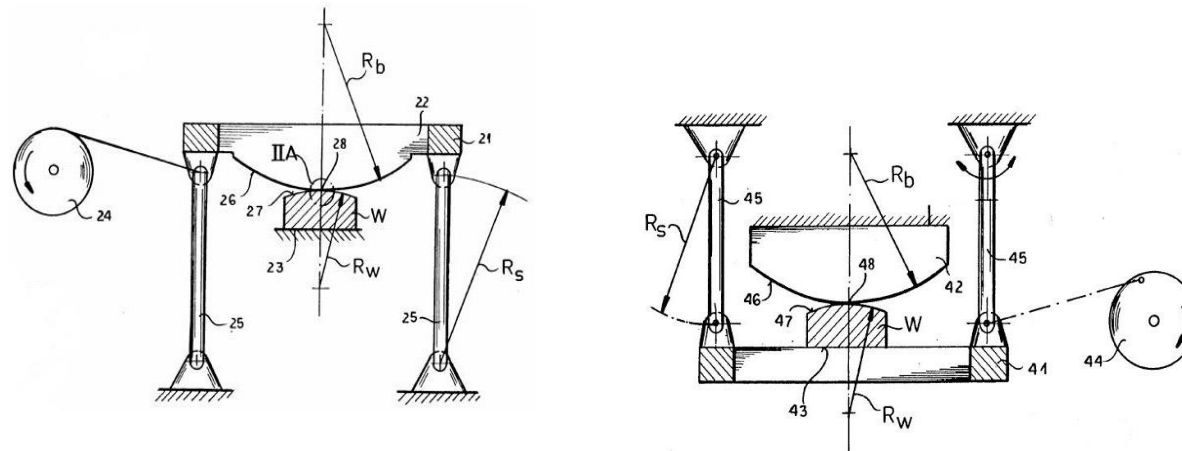
- Whether claimed invention is realized “coincidentally”
 - Both for infringement and validity
- Whether the object of the invention is realized
 - Even if none of the advantages of the invention is achieved
 - Unless the effect is claimed and cannot be achieved
- Whether an embodiment comprises additional features not mentioned in the claims or the specification
 - Unless the claim comprises a disclaimer
- Whether the feature is important for the patentability
- Whether a feature is in the preamble or the characterizing portion

Doctrine of Equivalents

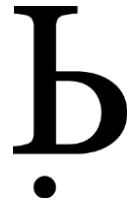


Need for the Doctrine of Equivalents

- Prevent bypassing of patent protection
 - Inventor's / patent attorney's imagination often not sufficient to foresee each and every possible way of realizing the invention
 - Competitor will try to deviate from the literal wording of at least one claim feature but nevertheless make use of the gist of the invention
- Example: kinematic reversal

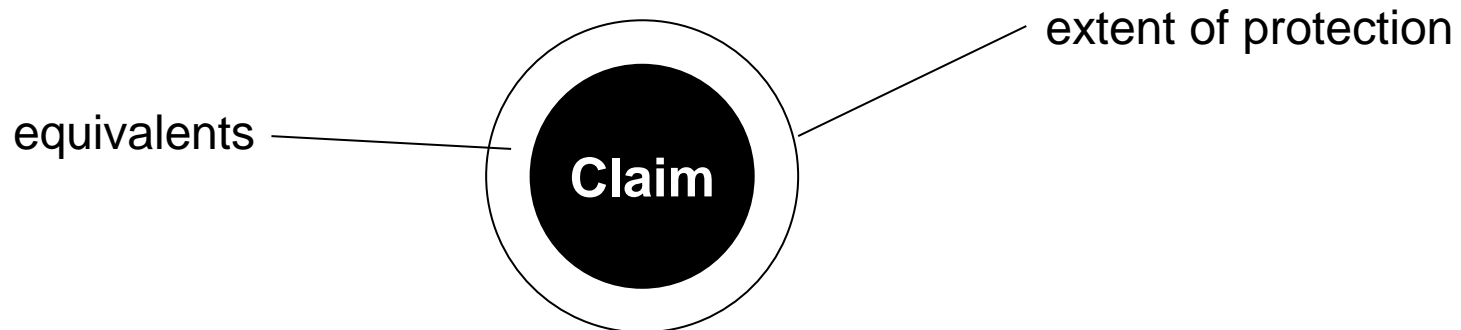


Doctrine of Equivalents



So what is the Doctrine of Equivalents?

- Extent of patent protection should extend to those variants of the claimed invention that are obvious to a skilled person.
 - When is an accused embodiment a variant of the invention?
 - When is the variant obvious?
 - Policy conflict: Adequate protection of inventive achievement vs. legal certainty

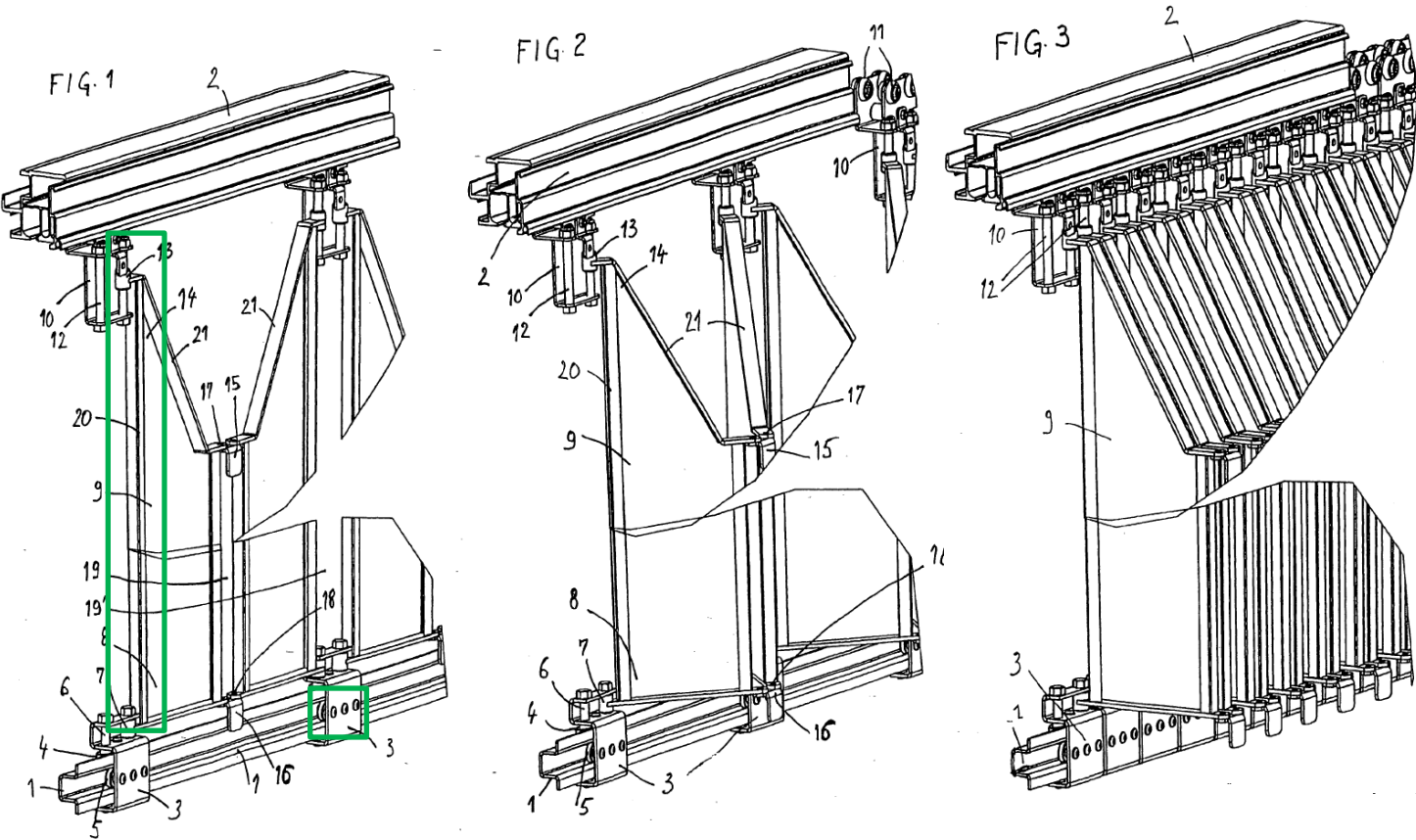


Example

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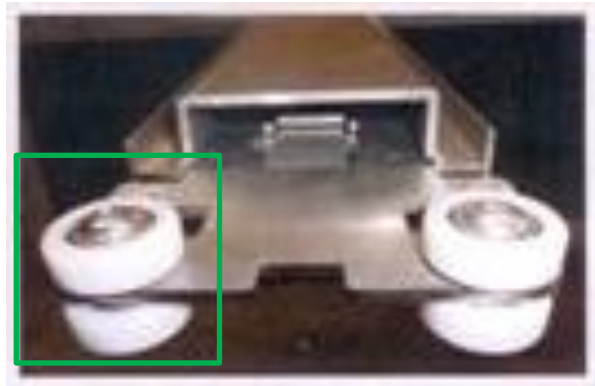
Example



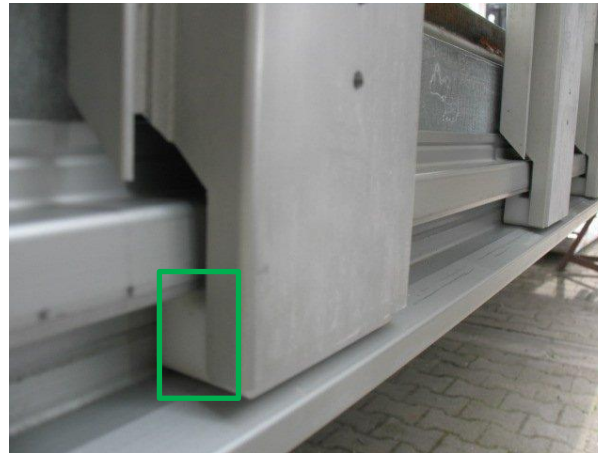
Example

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Patent: rollers



Attacked embodiment: sliders



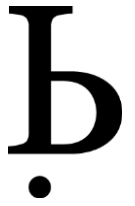
Actions

b.

Topic/Title of the presentation

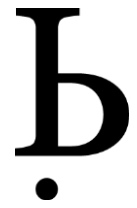
Slide 31

Actions



- Categorization of FTO search results
- Validity analysis
- Defensive approach
- Offensive approach

Categorizing the FTO search results



Cat.	Infringement	Validity/in force	Action
1	More likely than not	Examined, granted, in force	Analyze validity (prioritized)
2	More likely than not	Not examined, granted, in force	Analyze validity
3	Perhaps	Examined, granted, in force	To discuss (prioritized)
4	Perhaps	Not examined, granted, in force	To discuss
5	More likely than not	Not yet granted	To monitor (prioritized)
6	Perhaps	Not yet granted	To monitor
7	Probably not	In force	None

Validity analysis

- Patent is invalid if the claimed subject-matter was anticipated or rendered obvious by the prior art
- Prior art search is expensive and time consuming
 - Worthwhile only if there is a concrete danger of infringement
 - First look into the prior art on file at the patent office, or at patent offices where family members are prosecuted

Validity analysis

- Do not forget to check for
 - Added matter attacks (EPC Article 123(2))
 - Sufficiency of disclosure (EPC Article 83)
 - Inadmissible extension (EPC Article 123(3)) in case of opposition/national revocation action or amendment under EPC Article 105a
 - US: “indefiniteness” is ground for invalidity
- Also check dependent claims and other fallback positions comprised by the specification which might still be infringed

What is a defensive approach?

- Abandon the project
- Seek a license
- Purchase the patent
- Purchase the patent owner
- Avoid the patent
 - Avoiding the scope of the claims
 - Avoiding territorial scope of protection

When to take a defensive approach

- Infringement is clear-cut
- Infringement can easily be detected
- No signs of invalidity
- Removal of infringing feature difficult/time-consuming
- Damages potentially high
 - US: triple damages for willful infringement; jury!
 - Europe: infringer's profit
- Patent owner known to be aggressive
- Want to avoid bad PR

Avoiding the scope of the claims

- Design around
- Prior to design around/implementation of design-around: seek opinion from counsel
 - In particular with a view to the Doctrine of Equivalents
- Make sure that critical features can easily be changed
 - E.g.: implementation in software instead of hardware

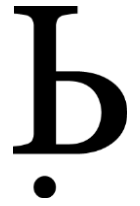
What is an offensive approach?

- Go ahead with the project
- Seek a royalty-free license
- Prepare for litigation
- Proactively file invalidity action
- Proactively file action for non-infringement
- Prepare for putting pressure on patent owner

When to take an offensive approach

- Non-infringement arguments exist
- There is promising prior art or other invalidity arguments
- Infringement hard to detect
- Infringing feature can easily be removed
- Blocking patent expires soon
 - Oftentimes sales in the beginning low -> low damages
 - Injunction would come too late
- Patent owner not expected to enforce his rights
 - Business relationship
 - Culture
- You own IP with which you can strike back

CONTACT US



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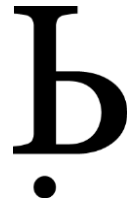
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Europe's Leading Patent Law Firms 2020 – Financial Times
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