

European Patenting alongside Innovation and Standardisation

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EPO Working Group on Standards
European Patent Office

presentation at
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Ghent, November 15, 2010



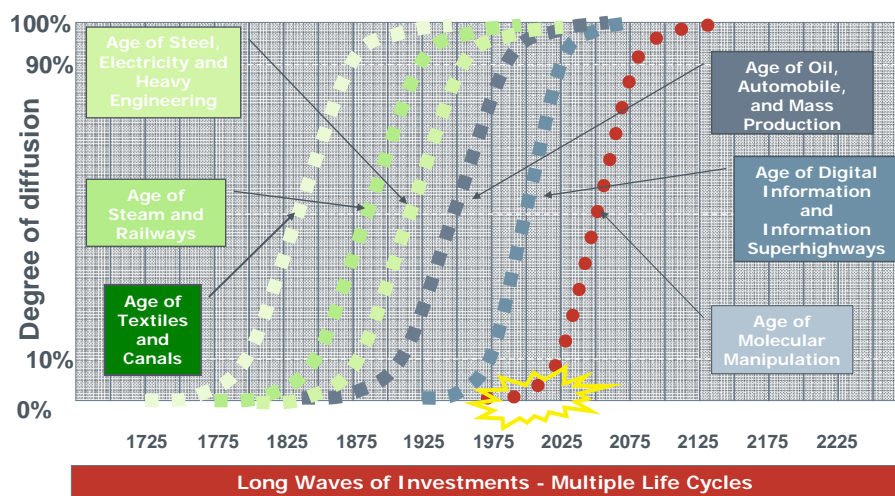
Outline

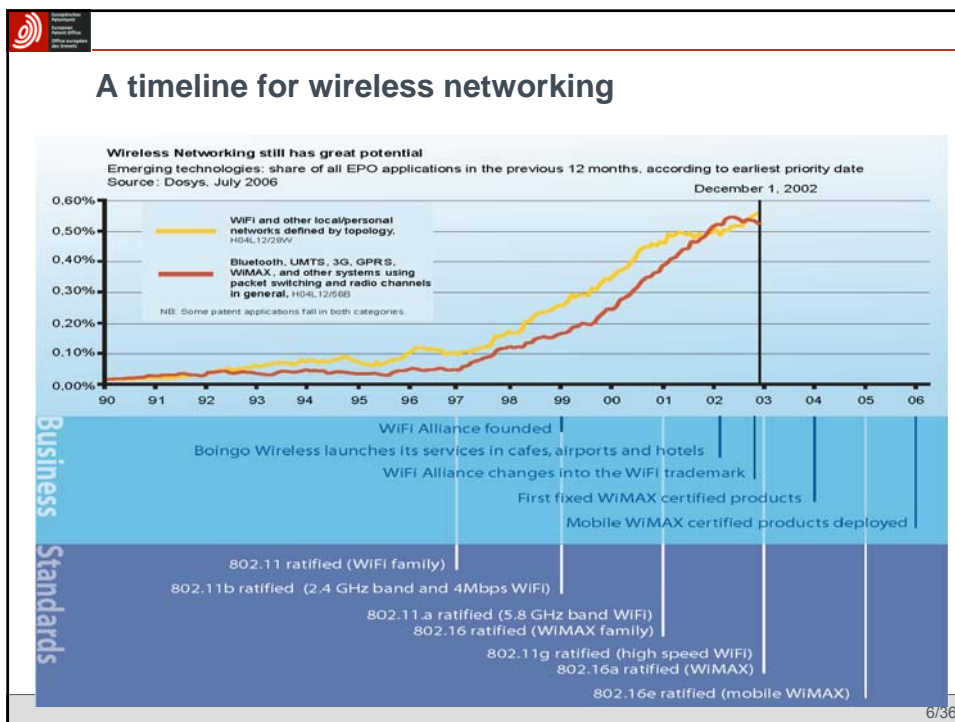
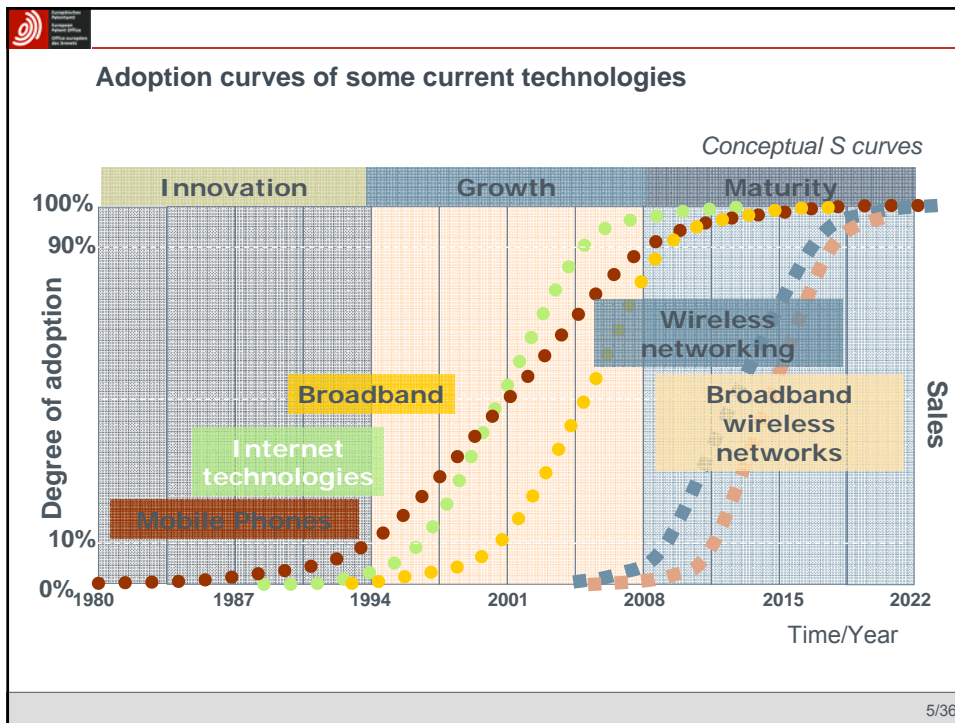
- Context and Relevance
- Innovation, standardisation, and patenting process
- Frequent obstacles to successful prosecution
- Dissemination and confidentiality policies
- Risk management perspectives
- Policy considerations

Context and Relevance

- Worldwide, deployment of digital technology and need for interoperability
 - Computing, Storing, Connecting, Transmitting
 - Screens everywhere: televisions, computers, mobile devices
- Bundles of Intellectual Property Rights over digital technologies
- Number of patents is force worldwide: a few millions.
- Over 200 000 patent applications per year at the EPO.
- The EPO is a major PCT authority (42% share of PCT workload).
 - e.g. for several US patents, search was carried out at the EPO.
 - the EPO is fully financed by its fees and is not an EU institution

Techno-Economic Paradigms

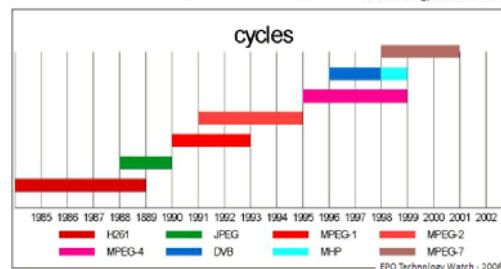
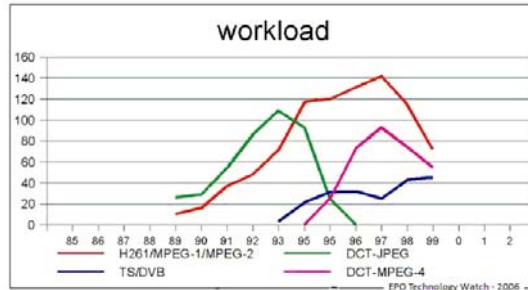






Workplan of Standards and Cycles

- MPEG 7
- DVB – MHP
- MPEG 4
- MPEG 2
- MPEG 1
- JPEG
- H261



7/36

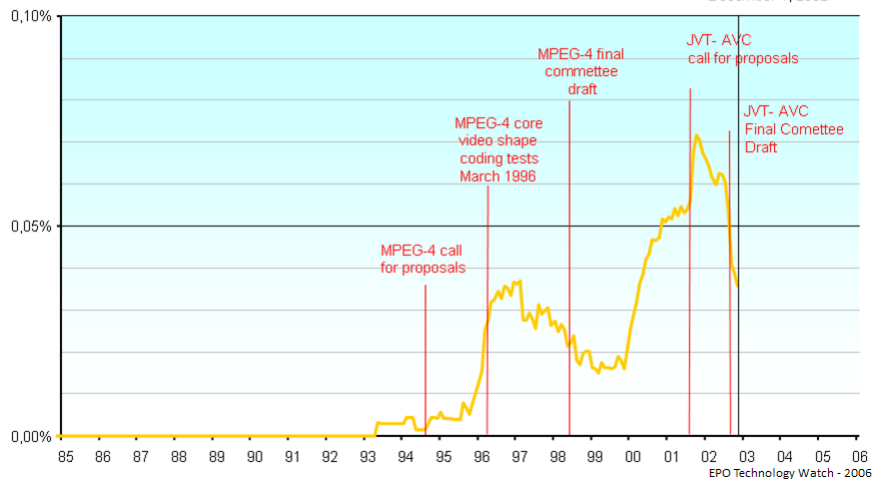


Workplan of Standards and Cycles: MPEG-4

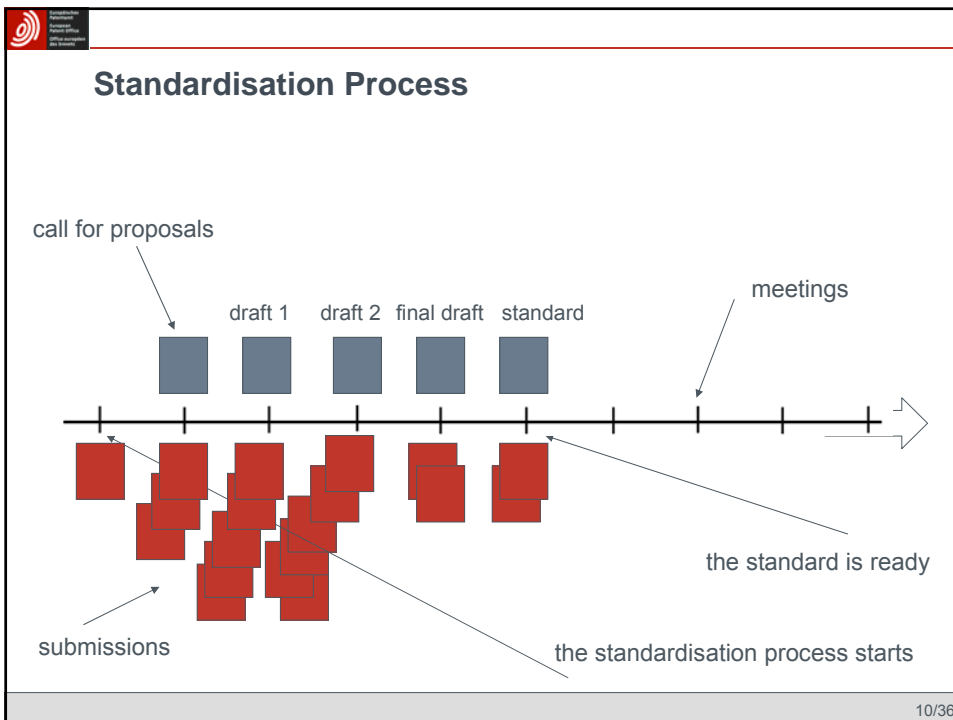
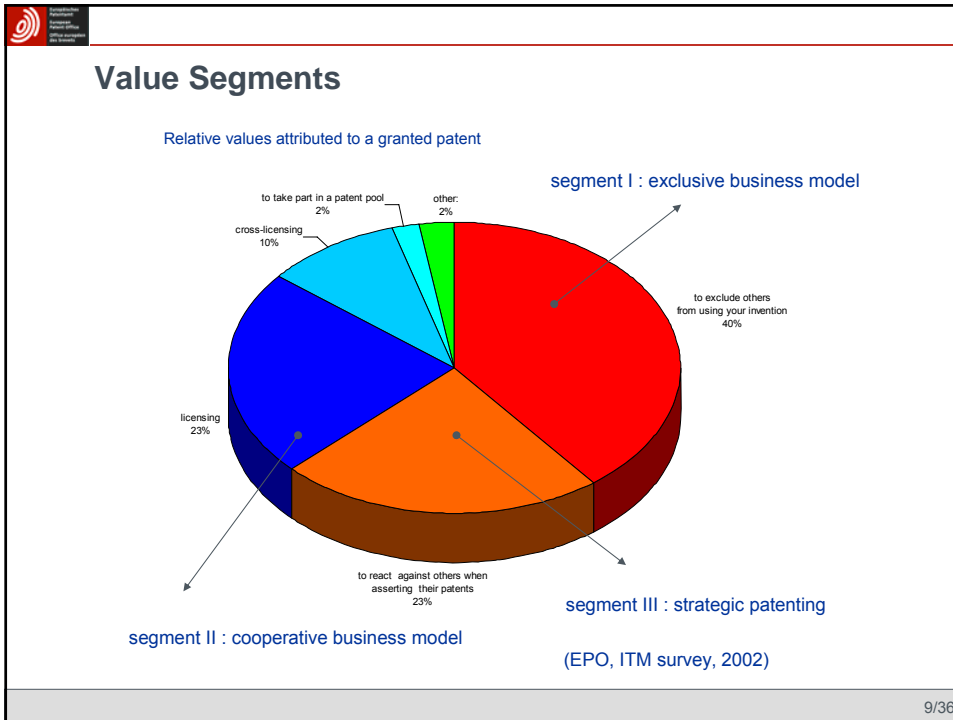
Emerging Technologies

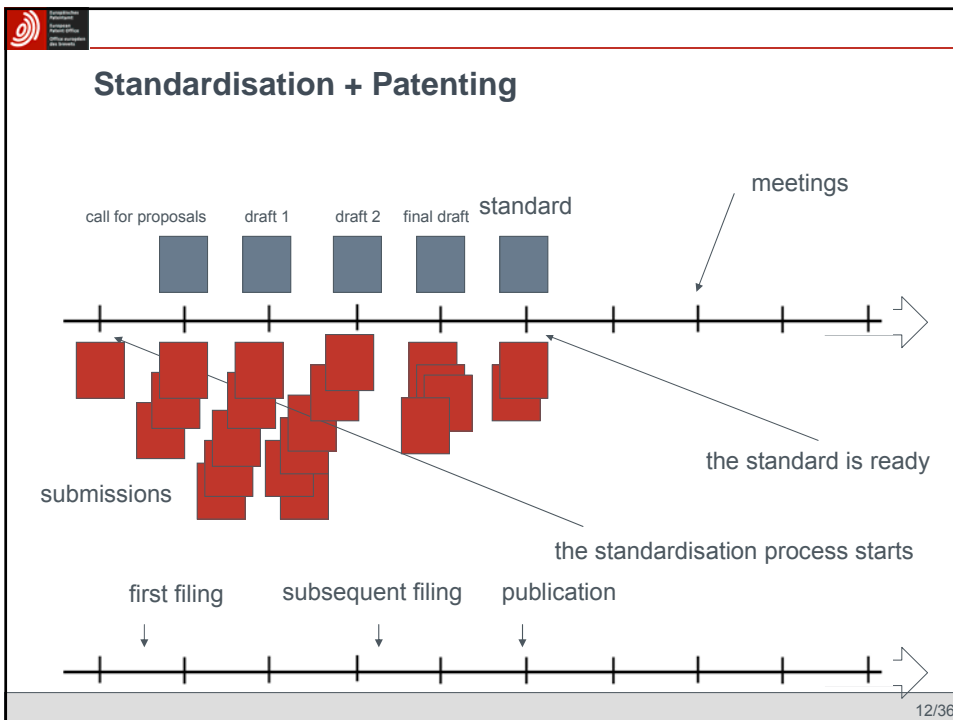
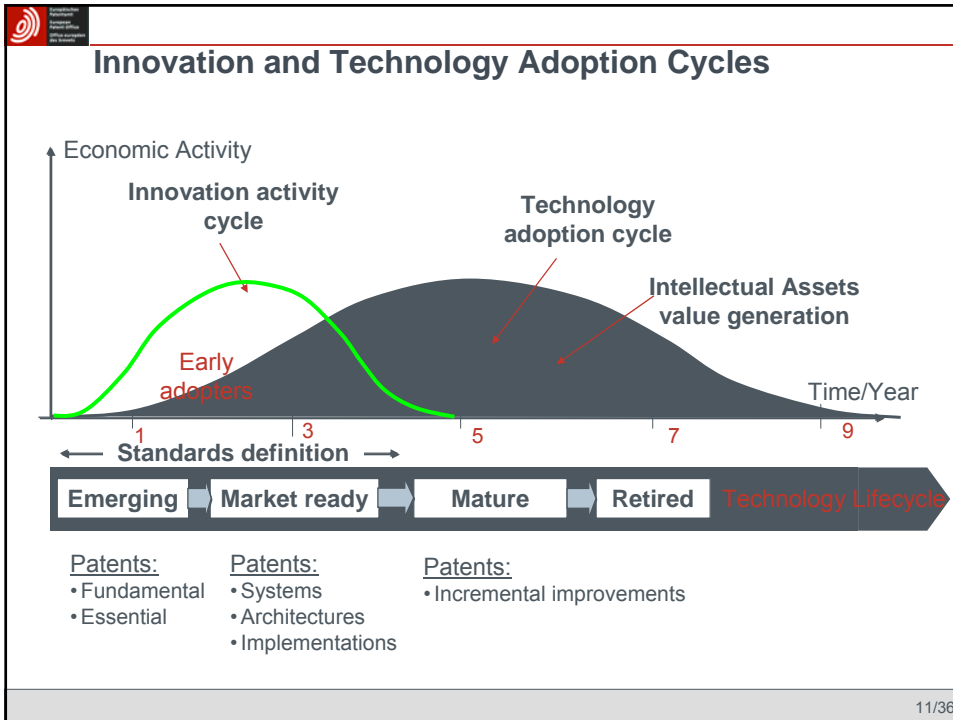
share of all EPO applications in the previous 12 months, according to earliest priority date

December 1, 2002



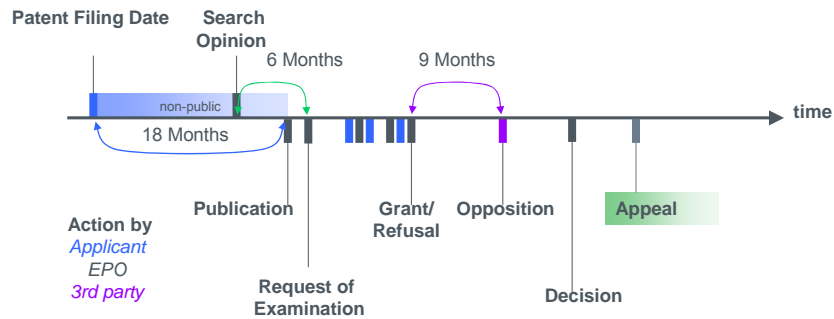
8/36







Patent Procedure (in a nutshell)



- The Application is **non-public** for up to **18 months** after filing
- Possibility of third party observations during the examination
- After grant, period of 9 months to file an opposition
- N.B.: Patent laws are different: Europe vs. other regions

13/36



Cooperation and Appropriation Policies

- SDO dissemination / confidentiality policy
 - all documents are confidential
 - up to a certain time, some documents are confidential
 - nothing is confidential
- IPR company policy
 - trade secrecy and no patenting
 - some secrecy and some patenting
 - no patenting and no secrecy



there is never any guarantee that the standard is patent-free

14/36



Frequent obstacles to successful prosecution

	all documents are confidential	up to a certain time, some documents are confidential	nothing is confidential
some secrecy and some patenting	Article 83 (disclosure) Article 84 (clarity)	Article 83 (disclosure) Article 84 (clarity) Article 54 (novelty)	Article 54 (novelty)

15/36



Availability to Public

Guidelines criteria: (see GL C-IV, 6.1, based on T300/86)

A written description, i.e. a document, should be regarded as made available to the public if, at the relevant date:

1. it was possible for members of the public to gain knowledge of the content of the document; and
2. there was no bar of confidentiality restricting the use or dissemination of such knowledge.

16/36



Usage of Standards and Preparatory Documents

- systematic as prior art in many fields, especially Telecommunications, Audio Video Media, Computers and Electronics.
- IPC: H04N, H04W, H04L, H04B, H04H, H04J, H04M, H04Q, G06F.
 - In Video Coding: extensively utilised and basis of the examination.
 - In Telecommunications: a serious percentage of the pertinent prior art used in all stages of the examination procedure
 - In certain fields a serious examination is unthinkable without the standards documents.
- Standards documents are retrieved electronically,
 - either from the internet
 - or from databases internally classified or arranged according to Technical Fields.

17/36



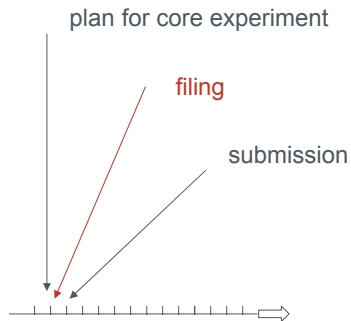
Some Data-Bases

Short Definition	Provider	Ground	Nr. documents
EIA/TIA standards	IHS (Info Handling Services)	Contract	5000
IEEE standards + drafts	IEEE	Contract + Membership	2000
ITU standards and drafts	ITU	Contract + Membership	34000
ETSI standards and drafts	ETSI	Membership	42000
IETF standards and drafts	IETF	Free access	47000
3GPP standards and drafts	3GPP	Free access	350000

18/36



Example #1

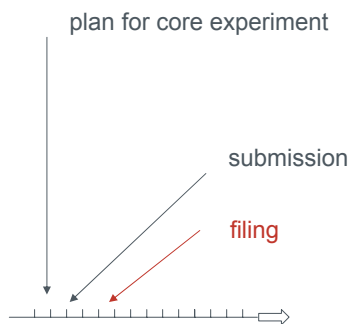


- plan for core experiments for the identification of the most effective technology
- first filing for the technology to be proposed
- submission to the standardisation group

19/36



Example #2



- plan for core experiments for the identification of the most effective technology
- submission to the standardisation group
- first filing for the technology to be proposed

20/36

Articles, Rules, and Guidelines

- The same general principles establishing the public availability of a document belonging to the state of the art according to Article 54 EPC are applied BOTH by the examining AND opposition divisions
 - for the general principles, see Guidelines for Examination in the EPO, D-V, 3.1.
- Regarding the citations of standards documents or preparatory documents in the search report, the EPO follows the principle laid down in Rule 61 EPC that the European search report shall mention those documents, available to the EPO at the time drawing up the report, which may be taken into consideration in deciding whether the invention to which the European Patent application relates is new and involves an inventive step.
 - Guidelines for Examination in the EPO C-IV, 6.1
 - Guidelines for Examination in the EPO B-III, 1.1 and 2.1

General Principle

- Preparatory documents used in the framework of the elaboration or further development of a standard should be treated like any other written or oral disclosures, i.e. they must have been made available to the public prior to the filing/priority date without any bar of confidentiality in order for them to qualify as state of the art.
- When a standard preparatory document is cited against an application during search or examination, the same facts are thus to be established as for any other piece of evidence.
 - (cf. Guidelines C-IV, 6.1).

SDO Dissemination Policies do matter

- The existence of an explicit confidentiality obligation must be determined case-by-case on the basis of the documents allegedly setting forth this obligation (cf. T273/02 and T738/04).

This may be general guidelines, directives or principles of the respective SDO, licensing terms or a Memorandum-of-Understanding resulting from the interaction between the SDO's and their members.

- In case of a general confidentiality clause, i.e. one that is not indicated on or in the relevant preparatory document itself, it must be established that the general confidentiality obligation actually extended to the document in question until the relevant point in time. This does not require, though, that the document itself is in addition marked as confidential (cf. T273/02).

Example of Confidentiality Policy

ETSI Rules of Procedure, 8 April 2009 - Annex 6: ETSI Intellectual Property Rights Policy

- The proceedings of a COMMITTEE shall be regarded as non-confidential except as expressly provided below and all information submitted to a COMMITTEE shall be treated as if non-confidential and shall be available for public inspection unless:
 - the information is in written or other tangible form; and
 - the information is identified in writing, when submitted, as confidential; and
 - the information is first submitted to, and accepted by, the chairman of the COMMITTEE as confidential.

CONFIDENTIAL INFORMATION incorporated in a STANDARD or TECHNICAL SPECIFICATION shall be regarded as non-confidential by ETSI and its MEMBERS, from the date on which the STANDARD or TECHNICAL SPECIFICATION is published.



Terms of Reference for a Joint Project between ITU-T Q.6/SG16 and ISO/IEC JTC 1/SC 29/WG11 for the Development of new Video Coding Recommendation and International Standard

8 Documents and Contributions

JVT will maintain a document registry and electronic distribution archive. The registry and archive will be linked to both the ITU-T Q.6/SG16 and ISO/IEC JTC 1/SC 29/WG 11 web sites.

Any document from a participant in the meeting should be available to all the participants before the meeting through the use of electronic document handling. A registration and uploading deadline several days in advance of the start of the meeting will be announced for each meeting. A "late, unannounced" document hand-carried to the meeting should be accepted only with the consensus of the meeting participants. This policy will be stated in the invitation letter that is provided for every meeting to both organisations.

All documents and contributions will be in electronic form (preferably MS Word).

In order to facilitate cross-organisational communication, all input and output documents will be public unless the contributor of an input document indicates otherwise. In that circumstance, the document will be accessible only through a private, password-protected site accessible only to ITU/ISO/IEC members and invited experts regularly attending the JVT meetings. Invited experts not regularly attending JVT meetings may be given access to such documents upon approval of its author.

25/36



The DVD standards from the DVD FLLC: NDA

cited from <http://www.dvdfllc.co.jp/> :



How To Obtain DVD Format/Logo License (2010-2014)

The DVD Format/Logo License is essential to manufacture DVD Products using the DVD Formats and the DVD Logo. To apply for our DVD Format/Logo License, please fill in and return both [NDA/Book Application Form](#) and [License Application Form](#) to us by e-mail (license@dvdfllc.co.jp).

You need to complete the following procedures for the DVD Format/Logo License.

- 1) **NDA/Book process**
 - a. Sign an NDA (Non-Disclosure Agreement)
 - b. Purchase DVD Format Books
- 2) **Licensing process**
- 3) **Verification at a Class A Verification Laboratory**

26/36

The DVD standards public?

Guidelines criteria: (see GL C-IV, 6.1, based on T300/86)

A written description, i.e. a document, should be regarded as made available to the public if, at the relevant date:

1. it was possible for members of the public to gain knowledge of the content of the document; and
2. there was no bar of confidentiality restricting the use or dissemination of such knowledge.

→ DVD standards not public

Case Law

- **T 202/97**
- The opponent cited as relevant state of the art the provisional agenda together with the preliminary documents and the minutes of the meeting of the standard developing working group ISO/TC22/SC3/WG9 together with a list of participants.
- The Board came to the conclusion that a proposal sent to the members of an SDO working group in preparation of their meeting does usually not underlie an obligation to maintain confidentiality and is therefore to be considered as being available to the public.
- The Board argued that even when a restricted group was invited to a meeting, the proposal sent together with the draft agenda was available to the public when no obligation to maintain confidentiality existed for the members of the group.

The task of a standardisation group is to achieve a standard which has been broadly agreed and corresponds to the recent development on the technical field. This task rules out any confidentiality obligation.

Extra Considerations

- When individual participants in the preparatory work are not bound by an obligation to maintain confidentiality, then even the standard preparatory documents that are only communicated to a limited circle of people form part of the state of the art, as long as the document was distributed prior to the filing/priority date (cf. T202/97, unpublished, point 2.2.1.1. of the reasons; T273/02, unpublished, points 3.1.-3.2. of the reasons).
- If an obligation of confidentiality exists with respect to a particular preparatory document, this obligation must not have been breached through dissemination of the document or of the knowledge contained therein (see Guidelines D-V, 3.1.3.2).
- What happens when the Standardisation Groups sets confidentiality rules, a company submits a proposal, and another company files a patent application on the same subject matter ?

A bundle of business risks

In a project, the future may turn out more adversely than we think today.

- Technology:
 - research risks
 - development risks
 - manufacturability risks
- Market:
 - customers acceptance risks
 - competitive risks
 - macroeconomic risks
- Intellectual Property:
 - freedom of operation risks
 - **patenting risks**
 - enforcement risks
 - confidentiality risks
- Finance:
 - credit risks
 - liquidity risks
 - operational risks
- Many other sorts of risk:
 - governance risks
 - business relationship risks
 - legal risks
 - reputation risks
 - political risks
 - societal risks
 - ...

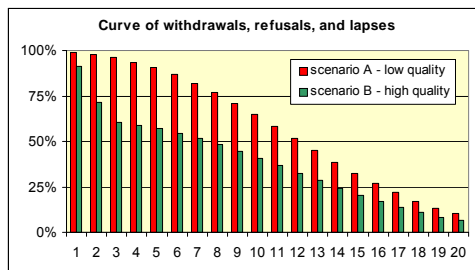


are IP risk aligned with business risks in case of standards?

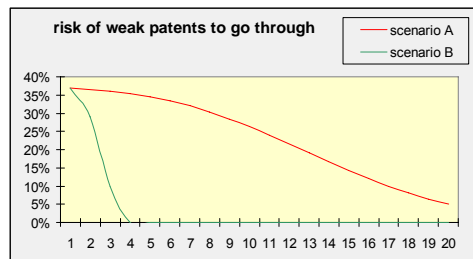
IP Risk Management

- time-to market
 - the sooner to the market, the earlier the break-even
 - timeliness and completeness of IP information counts
- freedom-of-operation risks
 - ambushes: a patent may emerge late, after many investments have been made
 - to hedge the risks, strategic patenting takes place - but trolls are immune
 - many patents create a patent thicket - paralysis - dominant positions
- enforcement risks
 - a patent may be not enforceable in a certain jurisdiction
 - enforcement in key markets, ie USA, becomes essential
 - without enforcement, patents do not bite - lower profit margins - no incentives
- confidentiality risks
 - policies of disclosure (date and content) are important, but yet not harmonised
 - confidentiality policies may be different according to jurisdictions (see first-to-file vs first to invent)
- patenting risks
 - patent rights may vanish during the patenting procedure or in court, eg because of new prior art

No bad patents



rights may vanish willingly or forcibly



Critical Points

- Area of interest: Audio/Video/Media, Computer, Telecoms
- access to **all technical contributions** (submissions, drafts,...)
- Technical field / **working group** / bibliographic data on each document
- **effective publication date** of submitted contributions (upload date)
- **clear confidentiality policy** (password cannot replace Non Disclosure Agreement)
- **clear dissemination policy** (distribution, copyright, data-protection issues)

Cooperation Agreements

Bridging the two worlds of patenting and standards:

- Resolutions at Global Standards Collaboration Conferences GSC 12, 13 and 14, encouraging SDOs "to cooperate with the relevant Patent and Trademark Offices to provide access to technical information for use by such Agencies that should help them improve the quality of patents being granted".
- ETSI Recommendation: "encourage the use of a document template to facilitate the work of patent examiners and to improve the identification of prior art".
- Memorandum of Understanding with IEEE and with ETSI: "share knowledge, information, and documentation on technology and standards, collaborate on education in standards and IP, inter-link databases".
- (with ITU in preparation)

A plurality of objectives

- For Patent Offices
 - no bad patents
 - awareness of emerging standards
- For Standardisation Bodies
 - no patent ambushes
 - no patent thickets
 - faster time to market
- For Businesses
 - manage knowledge and IP risks
- For Developers
 - compatibility of computer implemented inventions with Patent System
- For International Relations Policy Makers
 - level the playing field
 - integrate emerging economies
- For Politicians
 - strengthen an innovation-friendly environment

Conclusions

- Patent authorities are becoming pro-active and include standards-related documentation in their search databases.
- Standardisation organisations may want to link their IP declarations databases to the public registers of the major patent offices, so that the included information (validity of application, scope of granted patents, patent family, etc.) is constantly updated and valid.
- **To manage well IP risks, patent rules of standardisation organisations, in particular dissemination and confidentiality rules, should be explicit, clear, and implemented (Resolutions or Rules are needed).**

European Patenting alongside Innovation and Standardisation

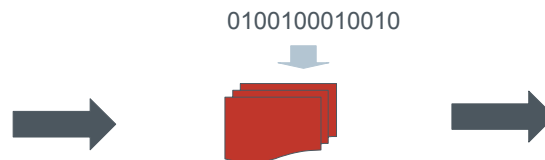
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Case #1: programme or data structure ?

- A programmable computing machine executes operations on input data according to a string of 0s and 1s, and produces output data. Such sequence of 0s and 1s may be seen as a control programme for suitably switching on and off a pipeline of operation boxes. The interface to supply such string is standardised as 'XYZ standard'.



- The string may be seen either as a control data structure or as a programme. How would a claim directed to a generalisation of the string look like ? A signal ? A bit-stream ? A programme ? What difference would it make ? How would you refer to the standard ? What about method claims ?



Case #2: bitstream syntax, data structure, or programme ?

- A bit-stream carries a sequence of point coordinates. Such sequence consists of a start code, data loops controlled by flags, and end code. The data loops comprise entropy encoded data. The string according to the syntax is expressed according to a programming language (a declaration of variables, which constitutes the beginning of a programme). The syntax is part of a standard "WZY".

```
pointSequence {
  uint (nbBits) nbPoints;
  IF (nbPoints < 3) {
    uint (S) bits;
    for (int i = 0; i < nbPoints; i++) {
      uint (bits) x[i];
      uint (bits) y[i];
    }
  } else {
    uint (S) bits;
    uint (bits) x[0];
    uint (bits) y[0];
    uint (S) bitLen;
    uint (S) bitLen;
    for (int i = 1; i < nbPoints; i++) {
      uint (bitLen) dy;
      x[i] = dx * x[i-1];
      y[i] = dy * y[i-1];
    }
  }
}
```

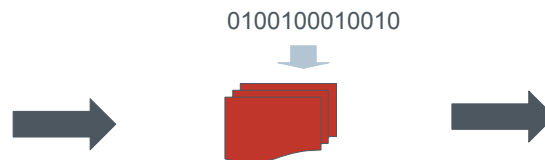
- Such bit-stream may be seen either as a control data structure or as a programme. How would a claim directed to a generalisation of the string look like ? A signal ? A bit-stream ? A programme ? What difference would it make?

39/36



Case #3: Signal, command, bitstream, code, data structure, or programme ?

- A string is sent to a computing machine. Depending on the string, the machine is set in a particular state, and becomes ready to process further data in a particular manner. This equates with the "run programme X" instruction to a computer. Such an instruction, in itself, is a programme.



- How would a claim directed to a generalisation of the string look like ? A signal ? A bit-stream ? A programme ? What difference would it make? May a programming language be equated to a standard ?

40/36