Chapter 8 – SPECIAL PUBLICATIONS OF INFORMATION AND DOCUMENTATION IN RESEARCH

CATEGORIES OF SPECIAL PUBLICATIONS:

STANDARDS

PATENT SPECIFICATIONS

DOCTORAL THESES

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INFORMATION TECHNOLOGY IN RESEARCH

Research activity cannot be achieved without being acquainted with state-of-art solutions on worldwide level. The system of information and documentation adopted by every researcher, the variety in form and structure of the consulted materials contributes to the success of the creation and research activity.

Efficiency means to do better what is already being done.
Peter F. Drucker.

CATEGORIES OF SPECIAL PUBLICATIONS FOR INFORMATION IN RESEARCH

- Standards
- Patent specifications
- Doctoral theses
- Technical catalogues
- Research reports (scientific and technical)
- Preprint-s
- Excerpts
- Bibliographies
- Bibliographical indices
- Reference works (dictionaries, encyclopedias, guides etc.)

SPECIAL PUBLICATIONS OF INFORMATION AND DOCUMENTATION IN RESEARCH

Standards. Patent specifications. Doctoral theses

GENERAL CHARACTERISTICS

- they directly set the content and results of scientific and technical activity
- they contain original manners of interpretation
- they allow informing the beneficiaries upon state-of-art results in the field
- they ensure technical quality, promptness and permanent access to scientific and technical information
- they are issued once
- they are destined for fields of reduced scientific interest

8.1. PATENT SPECIFICATIONS

CONTENTS

- Patent specification
- Invention
- Technical solution
- Patent specification. Structure. Description of patented technical solution. Bibliographical data. International standardized code
- Cataloguing of patent specifications
- Classification of patent specifications
- Retrieving patented information

8.1. PATENT SPECIFICATIONS

PATENT SPECIFICATION

- Official primary document
- It submits technical achievements and solutions
- It has social importance
- It solves an objective requirement
- It ensures progress
- It is based on original ideas
- It is a source of information
- It certifies temporary protection for an invention on the State territory wherein it was granted
- It ensures the patent owner, the rights conferred by the national legislation

IINVENTION

- It stands for the technical achievement or solution in a field of knowledge that displays the following characteristics:
  - Novelty and progress towards the stage attained so far
  - Contribution to the promotion of technical progress

TECHNICAL SOLUTION must cumulatively fulfill the following conditions:

- solve a problem and have applicability in a field of activity
- ensue from an activity of scientific creation
- be state-of-art in relation to existing solutions
- not having already been patented or made public in the country or abroad

8.1. PATENT SPECIFICATIONS

Description of invention

- It is the documentation that contains the technical information of a specification that has been patented or that is being patented
- It is published and disseminated by the specialized organization of the respective State
- It contains information with respect to the stage attained by technique
- It describes in detail the patented solution with the afferent explicative figures
- It plays an important role in the activity of information and documentation, during:

- the *orientation information stage*

- selecting and planning the themes of scientific research
- completing the researcher's knowledge in the field

- the *thematic information stage*

- obtaining data as regards the scientific research results
- knowledge upon the stage of technique worldwide

8.1. PATENT SPECIFICATIONS

Description of invention

- It is an appendix to the patent specification
- It is a document multiplied through typographical methods or through state-of-art information conveyers
- It is disseminated in the country and abroad
- It is drawn up in the national language of the country that granted the patent specification
- It is drawn up so as to cumulatively fulfill the defining elements of the patented specification

Structure of the patent specification

- Bibliographical data
- Description of the patented technical solution

8.1. PATENT SPECIFICATIONS

Bibliographical data

- They are characteristic elements for every library document / patent specifications
- They contribute to identifying and differentiating a document from other similar documents
- They may be retrieved on the first page (as patent specifications do not have a title page)
- They are preceded by an international standardized code

Description of the patented technical solution

- It expresses the stage of technique and of the technical progress attained through the invention
- It lays the stress on the novelty of the patented technical solution
- It offers details upon the specification achievement
- It proves the industrial applicability and the invention reproducibility

8.1. PATENT SPECIFICATIONS

International standardized code of bibliographical data

- It is a standardized code
- It has the same significance on international level
- It is a number consisting in two figures, framed between round parentheses
- It expresses the significance of the bibliographical data
- It is unitary for whatever country and whatever language chosen for drawing up the text
- It plays the role of identifying the bibliographical data inaccessible to the person consulting the invention description

8.1. PATENT SPECIFICATIONS

CODES FOR IDENTIFYING THE BIBLIOGRAPHICAL DATA

(10) DOCUMENT IDENTIFICATION
(20) DATE OF INTERNAL REGISTRATION
(30) DATE OF CONVENTIONAL PRIORITY
(40) DATE OF PUBLIC ACCESS TO THE DOCUMENT
(50) TECHNICAL INFORMATION
(60) REFERENCES TO OTHER LEGALLY RELATED DOCUMENTS OF INTERNAL UTILIZATION
(70) IDENTIFICATION OF THE PARTS REFERRING TO THE DOCUMENT
(80) IDENTIFICATION OF THE INFORMATION REFERRING TO INTERNATIONAL CONVENTIONS

8.1. PATENT SPECIFICATIONS

CODES FOR IDENTIFYING THE BIBLIOGRAPHICAL DATA

(10) DOCUMENT IDENTIFICATION
(11) Number of the document
(12) Description of the document type
(**19) Code of the country publishing the document**

(20) DATE OF INTERNAL REGISTRATION
(21) Registration number of the patent application
(22) Registration date of the patent application
(23) Other data, ex. Date of public display within an exhibition
(24) Date of entering into effect of the rights of industrial property

(30) DATE OF CONVENTIONAL PRIORITY
(31) Registration no. of the priority applications (no. of the priority certificate)
(32) Date wherefrom the priority of the patent specification has begun
(33) Country wherein the priority of the patent application has been solicited

8.1. PATENT SPECIFICATIONS

(40) DATE OF POSSIBLE PUBLIC ACCESS TO THE DOCUMENT
(41) Date of possible public access to the document
(42) Date of public access to the document
(43) Date of publishing through printing or through similar processes of a non-examined document
(44) Date of publishing through printing or through similar processes of an examined document
(45) Date of publishing through printing or through similar processes of a document having been granted / awarded before
(46) Date of publishing through printing or through similar processes only of the description claims
(47) Date of public access to the application

(50) TECHNICAL INFORMATION
(51) International classification
(52) National classification
(53) Decimal classification
(54) Title of invention
(55) Key words
(56) List of precedent documents
(57) Abstract or claim
(58) Researched field

8.1. PATENT SPECIFICATIONS

(60) REFERENCES TO OTHER LEGALLY RELATED DOCUMENTS OF INTERNAL UTLIZATION
(**61) Related through filling in**
(62) Related through division
(63) Related through continuation
(64) Related through republication

(70) IDENTIFICATION OF THE PARTS REFERRING TO THE DOCUMENT
(71) Claimer's name
(72) Inventor's name
(73) Owner's name
(74) Commissioner's name or name of the agency
(75) Name of the inventor who is also claimer
(75) Name of inventor who is also claimer and owner

(80) IDENTIFICATION OF THE INFORMATION REFERRING TO INTERNATIONAL CONVENTIONS
(81) States chosen according to Patent Corporation Treaty (PCT)
(82) States chosen according to Patent Corporation Treaty
(84) Designating the contracting States according to the European Patent Specification Convention
(85) Data of filling in according to Patent Corporation Treaty
(86) Date of filling in for international description
(87) Date of publication of the international description
(88) Information with respect to the publication of the research report

8.1. PATENT SPECIFICATIONS

In the numeric catalogue based on the international classification of the patent specifications, the catalogue cards with the complete description contain the following bibliographical data:

- Heading – name of applicant or, in default, name of the owner of the title of protection
- Title of invention. Type of invention. Type of document.
- Country and no. of the invention
- Registration date
- Publication date
- Observations (ex. Owner, Co-authors)
- International classification
- National classification

Within university libraries, the shortened description may be used, which contains sufficient bibliographical data for signaling the existence within the library of the patent specification:

- Heading
- Title of invention
- No. of invention
- International classification

8.1. PATENT SPECIFICATIONS

ELEMENTS OF THE REFERENCES FOR THE PATENT SPECIFICATION DOCUMENTS,
Included within bibliographies or for formulating quotations,
according to SR ISO 690:1996

Main responsibility

- applicant (71)
- name of the owner of the title of protection (73)

- Title of invention (54)

Secondary responsibility

- Persons or collectivities with other functions

Notes

– International classification (51)

Identification of the document

- Country or organism – specifically mentioned on the patent document
- Type of patent document (12)
- Number (11)
- Date of publication (41-47)

8.1. PATENT SPECIFICATIONS

SYSTEMS OF CLASSIFICATION

- They are used to the purpose of retrieving the information contained in the patent specification
- They are special classifications, other than the Universal Decimal Classification (UDC does not cover the information indexing depth of the patent specifications)
- They answer the particularities specific to patent specifications
- They are based on the following criteria: - object of the invention
  - range of use
  - functionality in industrial utilization

American patent classification

- It is the first classification in the field of the patent specifications
- It appeared in 1830
- It initially comprised 16 classes, designated with Arabic figures
- It currently comprises more than 360 classes

German patent classification

- It appeared in 1877
- It initially comprised 89 classes, a number with remained the same
- Sub-divisions were created within the classes: sub-classes, groups and sub-groups
- It has an alphanumeric notation

8.1. PATENT SPECIFICATIONS

INTERNATIONAL CLASSIFICATION FOR PATENT SPECIFICATIONS

- It entered into force into the 1st of September 1968
- It was adopted by the majority of the countries throughout the world in 1969
- It was rendered official in 1971 in the framework of the World Organization of intellectual property through the Agreement from Strasbourg – convention stipulating that at every five years the structure should be completed with the latest scientific and technical information from every field
- It comprises all domains of material production
- It has a hierarchical structure of logical ordination of the notions

http://www.wipo.int/classifications/ipc/ipc8/?lang=en

Structure of international classification for patent specifications

- Sections
- Sub-sections
- Classes
- Sub-classes
- Groups
- Sub-groups

8.1. PATENT SPECIFICATIONS

- **Sections** – They stand for a field of technique
  - There are 8 sections, symbolized with capital letters of the Latin alphabet
  - Example:
    - A - Current necessities of life
    - B – Diverse industrial techniques, transportation
    - C - Chemistry, metallurgy
    - D - Textiles, paper
    - E - Fixed constructions
    - F - Mechanics, Lighting, Heating, Armament, Explosives
    - G - Physics
    - H - Electricity

- **Sub-sections** - They are not symbolized
  - They have the title consisting in one word or in several words
  - They are divided in classes

8.1. PATENT SPECIFICATIONS

- **Classes** – They represent a sub-domain
  - They have a title and a symbol, consisting in the symbol of the section whereto it pertains and a group of two Arabic figures

  Examples: F02 – motors with combustion, functional assemblies of the motors with hot gas or with combustion products

- **Sub-classes** – They represent an assembly of themes from a sub-domain
  - They have a title and a symbol, consisting in the symbol of the class and a letter of the Latin alphabet

  Example: F02F – cylinders, pistons or housings for motors with internal combustion

- **Groups** – They represent a theme from an assembly of themes
  - They have a title and a symbol, made up of the sub-class symbol and one, two or three Arabic figures, followed by a slash and two zeros

  Example: F02F 1/00 – Cylinders. Cylinder heads

- **Sub-groups** – They represent a particular solution for the theme of the main group
  - They are subordinate to the main group they pertain to
  - The symbol consists in the symbol of the group it pertains to, the zeros being substituted with one, two or three Arabic figures

  Example: F02F 1/02 Cooling means

8.1. PATENT SPECIFICATIONS

INFORMATION RETRIEVAL PROCEDURE

- Defining the enunciation of the theme in consecrated technical terms
- Extracting from the enunciation of the theme, the key-words
- Identification in the Index of key-words, appendix to the guidebook of international classification, of the classification symbol
- Search and check-up of the classification symbol in the Guidebook of international classification
- Finishing off the classification symbol
- Search for the codified information through international classification in the information sources: numerical catalogues

SPECIALIZED ORGANIZATIONS

- **OSIM – State Office for Inventions and Brands**
  http://www.osim.ro/
  http://www.osim.ro/legis/legislatie/brevet/lgbrcont.htm
- **CCIBv – Chamber of Commerce and Industry Braşov**
  - Information for obtaining protection titles the field of industrial property both in the country and abroad: brands and geographical indications, patent specifications, designs and industrial models;
  http://80.96.71.17/ccibv/index.php?id=11
- **Transilvania University of Braşov – Department of Intellectual Property**
  - It is a department within "**Transilvania**" University of Braşov, of authority in the field of intellectual / industrial property.
  http://www.unitbv.ro/dpi/

8.2. DOCTORAL THESES

Contents

- Characteristics
- Definition
- Particularities of bibliographical description
- Example

8.2. DOCTORAL THESES

CHARACTERISTICS

- They are primary documents
- They are documents with reduced circulation

DEFINITION

- It is a work drawn up by a candidate
- It is accepted to the purpose of obtaining the title of doctor
- It has scientific character
- It contains elements of novelty and originality

PARTICULARITIES OF BIBLIOGRAPHICAL DESCRIPTION

As library documents, they display the following particularities:

- The main bibliographical description is made at the author's name (main author heading)
- The body of the bibliographical description contains elements characteristic for the monographs: title and mention of responsibility, issuing data, physical description, series
- In the area of the notes, mentions are made as regards the scientific degree, the name and the first name of the doctorate leader and the bibliography

EXAMPLE:

BOGATU, Nicolae
Dimensiuni individuale şi psihosociale ale capacității de adaptare la cerințe specifice de rol / Nicolae Bogatu. – Bucureşti: Universitatea din Bucureşti, Facultatea de Sociologie, Psihologie, Pedagogie, Catedra de Psihologie, 1991. – [286]p. 32cm
Teza de doctorat. Cond. şt. Prof. univ. Pantelimon Golu
Bibliogr. p.1-14

8.2. DOCTORAL THESES

ROMANIAN NATIONAL BIBLIOGRAPHY. DOCTORAL THESES

- Bibliography elaborated by the National Library of Romania
- The work has been issuing since1995
- It disposes of an alphabetic index of names, of an alphabetic index of titles and of an alphabetic index of publishing houses
- It comprises doctoral theses undergoing the legal obligation of being sent, in guise legal deposit, to the National Library of Romania
- The arrangement of the works was carried through on the fields of Decimal Universal Classification

8.2. DOCTORAL THESES

BIBLIOGRAPHY OF THE DOCTORAL THESES: 1957-2007. Defended at Transilvania University of Braşov. Defended by members of the University teaching staff in other university centers

- The Bibliography is systematized on faculties
- Within the faculties, the authors' names are alphabetically arranged

COMPRISES:

- 1230 titles of doctoral theses
- Index of authors
- Index of scientific leaders
- Index of year

8.2. DOCTORAL THESES

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2. CATALOGUL standardelor române 2006. Bucureşti: ASRO, 2007. [CATALOGUE of Romanian Standards 2006. Bucharest: ASRO, 2007]
3. GHEORGHE, Mihaela ; TOMA, Doina. Complemente de biblioteconomie. Aplicaţii. Braşov: Universitatea Transilvania din Braşov, 1998.197 p. [Complements of Library Science. Applications. Brasov: Transilvania University of Brasov, 1998.197 p.]
4. GHEORGHIU, Mircea. Valorificarea literaturii de brevete de invenţii. Bucureşti: Institutul Naţional de Informare şi Documentare, 1985. 216 p [Enhancement of the Patent Specification Literature. Bucharest: National Institute of Information and Documentation, 1985. 216 p.]

Web bibliography:

1. ANGHINII, E. ; BĂRDEANU, V. ; HUMELNICU, M. ; STOMFF, S. Standardizarea Partenerul Dumneavoastră [online] București: ASRO, 2006 [Standardizing Your Partner [online] Bucharest: ASRO, 2006 [quoted the 17th of November 2008]. Available on the Internet: http://www.asro.ro/romana/noutate/Materiale/materiale_iunie/indrumar.doc
2. *ASRO Asociaţia de Standardizare din România* : Organism Naţional de standardizare. Informaţii despre ASRO [online], 2007. *[ASRO Romanian Standards Association*: National Organism for Standardization. Information upon ASRO [online], 2007 Updated the 8th of April 2008 [quoted the 27th of October 2008]. Available on the Internet: http://www.asro.ro/.
3. International Classification for Standards [online]. Sixth Edition. International Organization for Standardization, 2005 [quoted the 16th of November 2009]. Available on the Internet:http://www.iso.org/iso/ics6-en.pdf
4. ISO International Organization for Standardization. International Standards for Business, Government and Society [online], 2008. [quoted the 16th of November 2009]. Available on the Internet: http://www.iso.org/iso/home.htm
   http://www.iso.org/iso/iso_catalogue_ics_browse.htm
   http://www.iso.org/iso/search.htm
5. ISO Organizaţia Internaţională de Standardizare [ISO National Organization of Standardization][online] [quoted the 17th of November]. Available on the Internet: http://timepiece.ro/Tehnologie-Organizare/ISO-Organizatia-Internationala-de-Standardizare.html
6. OSIM – Oficiul de Stat pentru Invenţii şi Mărci [OSIM – State Office for Inventions and Brands] [online] [quoted the 17th of November 2009]. Available on the Internet: http://www.osim.ro/

THEME

1. Enunciate the theme of the doctoral thesis.
2. Determine the symbol of classification for the thematic content of the doctoral thesis, in compliance with:

- International classification of the standards
- Alphanumeric classification of the standards
- Alphanumeric classification of the patent specifications
- Universal Decimal Classification (doctoral theses)

3. Make up a brief bibliographic list for the doctoral thesis or for the field it pertains to, which should contain titles of standards, patent specifications and doctoral theses (2 bibliographic references for every type of document)