Chapter 7. Patents

Sample Citation and Introduction to Citing Patents

The general format for a reference to a patent, including punctuation:

<table>
<thead>
<tr>
<th>Inventors</th>
<th>Assignee</th>
<th>Title</th>
</tr>
</thead>
</table>

Examples of Citations to Patents

A patent is "A title of legal protection of an invention, issued, upon application and subject to meeting legal criteria, by a government office" (NISO Z39.29). Patents are a special type of legal document requiring specific information. Thus citations to patents are very different from the standard book.

- Patents have two types of "authors", the inventor(s) of the device, process, or other entity being patented, and the "assignee", the organization or individual(s) holding legal title to the patent. Note that assignee is used to refer to both a single patent holder or multiple holders.
- The name of the country granting the patent and the patent number are used instead of place of publication and publisher. Use the adjectival form of the English name for the country, e.g., "French" for France and "German" for Germany. Note, however, that US patents use United States and UK patents United Kingdom, not American and British.

In addition to patents being granted by individual countries, they may be issued by a regional office working for a number of countries, such as the European Patent Office, the Eurasian Patent Organization, and the African Regional Intellectual Property Organization. Under such regional systems, an applicant requests protection for the invention in one or more countries, and each country decides whether to offer patent protection within its borders. Patent numbers beginning with EP, for example, were issued by the European Patent Office. Finally, international patents may be issued through the World Intellectual Property Organization (WIPO). "World patent" is used for the country, and patent numbers begin with WO.

Either a final patent or a patent application may be cited. For the latter, include the word application as part of the patent document type. See the rules for Patent Applications below and example #26.

Continue to Citation Rules with Examples for Patents.

Continue to Examples of Citations to Patents.

**Citation Rules with Examples for Patents**

Components/elements are listed in the order they should appear in a reference. An R after the component name means that it is required in the citation; an O after the name means it is optional.

Author (Inventor) (R) | Author (Assignee) (R) | Author Affiliation (O) | Title (R) | Type of Medium (R) | Patent Country (R) | Patent Document Type (R) | Country Code (R) | Patent Number (R) | Date Issued (R) | Pagination (O) | Physical Description (O) | International Classification Code (O) | Country Classification Code (O) | Application Number and Filing Date (O) | Language (R) | Notes (O) | Patent Applications

**Author (Inventor) for Patents (required)**

**General Rules for Author (inventor)**

- Begin with names of the inventors
- List names in the order they appear in the text
- Enter surname (family or last name) first for each inventor
- Capitalize surnames and enter spaces within surnames as they appear in the document cited on the assumption that the author approved the form used. For example: Van Der Horn or van der Horn; De Wolf or de Wolf or DeWolf.
- Convert given (first) names and middle names to initials for a maximum of two initials following each surname
- Give all inventors, regardless of the number
- Separate inventor names from each other by a comma and a space
- Follow the last named inventor with a comma and the word inventor or inventors
- End inventor information with a semicolon and a space
Specific Rules for Author (inventor)

- Surnames provided in all capital letters
- Surnames with hyphens and other punctuation in them
- Other surname rules
- Given names containing punctuation, a prefix, a preposition, or particle
- Designations of rank in a family, such as Jr and III
- Degrees, titles, and honors before or after a personal name
- Non-English names for inventor
- Names in non-roman alphabets (Cyrillic, Greek, Arabic, Hebrew, Korean) or character-based languages (Chinese, Japanese)
- Organizations as inventor
- Options for inventor names

<table>
<thead>
<tr>
<th>Box 1. Surnames provided in all capital letters.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- When the surname is provided in all capital letters, lowercase all letters except the first letter of the surname (or surnames if a compound name) and any prefix, preposition, or particle</td>
</tr>
<tr>
<td>O’CONNER ( \text{becomes} ) O’Conner</td>
</tr>
<tr>
<td>ROBLES GARCIA ( \text{becomes} ) Robles Garcia</td>
</tr>
<tr>
<td>LE HENANFF ( \text{becomes} ) Le Henanff</td>
</tr>
<tr>
<td>HALLEY DES FONTAINES ( \text{becomes} ) Halley des Fontaines</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Box 2. Surnames with hyphens and other punctuation in them.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Keep hyphens in surnames</td>
</tr>
<tr>
<td>Estelle Palmer-Canton ( \text{becomes} ) Palmer-Canton E</td>
</tr>
<tr>
<td>Ahmed El-Assmy ( \text{becomes} ) El-Assmy A</td>
</tr>
<tr>
<td>- Keep particles, such as O’, D’, and L’</td>
</tr>
<tr>
<td>Alan D. O’Brien ( \text{becomes} ) O’Brien AD</td>
</tr>
<tr>
<td>James O. L’Esperance ( \text{becomes} ) L’Esperance JO</td>
</tr>
<tr>
<td>U. S’adeh ( \text{becomes} ) S’adeh U</td>
</tr>
<tr>
<td>- Omit all other punctuation in surnames</td>
</tr>
<tr>
<td>Charles A. St. James ( \text{becomes} ) St James CA</td>
</tr>
</tbody>
</table>
Box 3. Other surname rules.

- Keep prefixes in surnames
  
  Lama Al Bassit becomes Al Bassit L
  
  Jiddeke M. van de Kamp becomes van de Kamp JM
  
  Gerard de Pouvourville becomes de Pouvourville G

- Keep compound surnames even if no hyphen appears
  
  Sergio Lopez Moreno becomes Lopez Moreno S
  
  Jaime Mier y Teran becomes Mier y Teran J
  
  Virginie Halley des Fontaines becomes Halley des Fontaines V

- Ignore diacritics, accents, and special characters in names. This rule ignores some conventions used in non-English languages to simplify rules for English-language publications.
  
  - Treat letters marked with diacritics or accents as if they are not marked
    
    Å treated as A
    
    Ø treated as O
    
    Ç treated as C
    
    Ł treated as L
    
    à treated as a
    
    ţ treated as g
    
    ñ treated as n
    
    ü treated as u
  
  - Treat two or more letters printed as a unit (ligated letters) as if they are two letters
    
    æ treated as ae
    
    œ treated as oe

Box 4. Given names containing punctuation, a prefix, a preposition, or particle.

- Disregard hyphens joining given (first or middle) names

Box 4 continues on next page...
Box 4 continued from previous page.

Jean-Louis Lagrot  becomes  Lagrot JL

- Use only the first letter of given names and middle names if they contain a prefix, a preposition, or another particle
  - D'Arcy Hart  becomes  Hart D
  - W. St. John Patterson  becomes  Patterson WS
  - De la Broquerie Fortier  becomes  Fortier D
  - Craig McC. Brooks  becomes  Brooks CM

- Disregard traditional abbreviations of given names. Some non-US publications use abbreviations of conventional given names rather than single initials, such as St. for Stefan. Use only the first letter of the abbreviation.
  - Ch. Wunderly  becomes  Wunderly C
  - C. Fr. Erdman  becomes  Erdman CF

- For non-English names that have been romanized (written in the roman alphabet), capitalize only the first letter if the original initial is represented by more than one letter
  - Iu. A. Iakontov  becomes  Iakontov IuA
  - G. Th. Tsakalos  becomes  Tsakalos GTh

Box 5. Designations of rank in a family, such as Jr and III.

- Place family designations of rank after the initials, without punctuation
- Convert roman numerals to arabic ordinals

Examples:

- Vincent T. DeVita, Jr.  becomes  DeVita VT Jr
- James G. Jones II  becomes  Jones JG 2nd
- John A. Adams III  becomes  Adams JA 3rd
- Henry B. Cooper IV  becomes  Cooper HB 4th
Box 6. Degrees, titles, and honors before or after a personal name.

- Omit rank and honors such as Dr. or Sir that precede a name
  
  Prof. Dr. Eberhard Stennert  becomes  Stennert E
  
  Sir Frances Hildebrand  becomes  Hildebrand F

- Omit degrees, titles, and honors such as M.D. following a personal name
  
  James A. Reed, M.D., F.R.C.S.  becomes  Reed JA
  
  Kristine Schmidt, Ph.D.  becomes  Schmidt K

Box 7. Non-English names for inventor.

- Translate the word found for inventor into English. However, the wording found on
  the publication may always be used.

- To assist in identifying inventors, below is a brief list of non-English words for
  inventor:

<table>
<thead>
<tr>
<th>Language</th>
<th>Name for Inventor</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>inventeur</td>
</tr>
<tr>
<td>German</td>
<td>Verfasser</td>
</tr>
<tr>
<td></td>
<td>Erfinder</td>
</tr>
<tr>
<td>Italian</td>
<td>inventore</td>
</tr>
<tr>
<td>Russian</td>
<td>izobretatel</td>
</tr>
<tr>
<td>Spanish</td>
<td>inventor</td>
</tr>
</tbody>
</table>

Box 8. Names in non-roman alphabets (Cyrillic, Greek, Arabic, Hebrew, Korean) or
character-based languages (Chinese, Japanese).

- Romanization, a form of transliteration, means using the roman (Latin) alphabet to
  represent the letters or characters of another alphabet. A good authority for
  romanization is the  ALA-LC Romanization Tables.

- Romanize names in Cyrillic (Russian, Bulgarian, etc.), Greek, Arabic, Hebrew,
  Korean, or character-based languages, such as Chinese and Japanese

- Capitalize only the first letter of romanized names if the original initial is
  represented by more than one letter

  Iu. A. Iakontov  becomes  Iakontov IuA

Box 8 continues on next page...
Box 8 continued from previous page.

G. Th. Tsakalos  becomes  Tsakalos GTh

- Ignore diacritics, accents, and special characters in names. This rule ignores some conventions used in non-English languages to simplify rules for English-language publications.
  - Treat letters marked with diacritics or accents as if they are not marked
    - Å treated as A
    - Ø treated as O
    - Ç treated as C
    - Ł treated as L
    - à treated as a
    - ĝ treated as g
    - ñ treated as n
    - ü treated as u
  - Treat two or more letters printed as a unit (ligated letters) as if they are two letters
    - æ treated as ae
    - œ treated as oe

Box 9. Organizations as inventor.

An organization such as a university, society, association, corporation, or governmental body may serve as an inventor, although this is more unusual today.

- Give the name of the organization as it appears on the title page of the patent, using whatever abbreviations and punctuation are found
- Do not omit any words or abbreviate any words that are not already abbreviated

Examples:

- Ethicon Inc
- Boston Scientific Limited
- Matsushita Electric Industrial Co., Ltd.

Box 9 continues on next page...
The Dow Chemical Company

- Separate two or more organizations by a semicolon

  Medical Design Labs, Inc.; Cardiac Pacemakers, Ltd., inventors.

- For names of organizations in languages other than English:
  - Give names in languages using the roman alphabet (primarily European languages, such as French, Italian, Spanish, German, Swedish, etc.) as they appear in the publication. Whenever possible follow a non-English name with a translation. Place all translations in square brackets.

    Istituto di Fisiologia Clinica del CNR

    Universitätsmedizin Berlin

    Consejo Superior de Investigaciones Científicas [Spanish National Research Council]

  - Romanize (write in the roman alphabet) or translate names of organizations in Cyrillic, Greek, Arabic, Hebrew, or Korean. A good authority for romanization is the ALA-LC Romanization Tables. Whenever possible follow a non-English name with a translation. Place all translations in square brackets.

    Tjumenskaja Gosudarstvennaja Meditsinskaja Akademija [Tyumen State Medical Academy]

    or

    [Tyumen State Medical Academy]

  - Translate names of organizations in character-based languages such as Chinese and Japanese. Place all translations in square brackets.

    [Korean Research Institute of Bioscience and Biotechnology]

  - Ignore diacritics, accents, and special characters in names. This rule ignores some conventions used in non-English languages to simplify rules for English-language publications.

    - Treat letters marked with diacritics or accents as if they are not marked

      Å treated as A
Box 9 continued from previous page.

Ø treated as O
Ç treated as C
Ł treated as L
à treated as a
ģ treated as g
ń treated as n
ü treated as u

- Treat two or more letters printed as a unit (ligated letters) as if they are two letters

æ treated as ae
œ treated as oe

Box 10. Options for inventor names.

The following format is not NLM practice for citing names of inventors, but is an acceptable option:

- Full first names of inventors may be given. Separate the surname from the given name or initials by a comma and a space; follow initials with a period; separate successive names by a semicolon and a space.

  Takagi, Yasushi; Harada, Jun; Chiarugi, Alberto M.; Moskowitz, Michael A., inventors;
  Mann, Frederick D.; Swartz, Mary N.; Little, R.T., inventors;

Examples for Author (inventor)

1. Standard US patent
2. US patent with optional full names for inventor(s)
3. Patent in which an inventor is also an assignee
4. Patent in which an organization is the inventor
Author (Assignee) for Patents (required)

General Rules for Author (assignee)

- List names of the assignee (also called proprietors or applicants in some countries) in the order they appear in the text
- Give the name of an organization as it appears on the title page of the patent, using whatever abbreviations and punctuation are found
- Enter surname (family or last name) first for each person as assignee
- Capitalize surnames and enter spaces within surnames as they appear in the document cited on the assumption that the author approved the form used. For example: Van Der Horn or van der Horn; De Wolf or de Wolf or DeWolf.
- Convert given (first) names and middle names to initials for a maximum of two initials following each surname
- Give all assignee, regardless of the number
- Separate assignee names from each other by a comma and a space
- Follow the last named assignee with a comma and the word assignee (assignee is used for both singular and plural)
- End assignee information with a period

Specific Rules for Author (assignee)

- Names provided in all capital letters
- Surnames with hyphens and other punctuation in them
- Other surname rules
- Given names containing punctuation, a prefix, a preposition, or particle
- Designations of rank in a family, such as Jr and III
- Degrees, titles, and honors before or after a personal name
- Non-English names for assignee
- Names in non-roman alphabets (Cyrillic, Greek, Arabic, Hebrew, Korean) or character-based languages (Chinese, Japanese)
- Organizations as assignee
- Both individuals and organizations as assignee
- Options for assignee names

Box 11. Names provided in all capital letters.

- When the surname of an individual is provided in all capital letters, lowercase all letters except the first letter of the surname (or surnames if a compound name) and any prefix, preposition, or particle

  O’CONNER becomes O’Conner

  ROBLES GARCIA becomes Robles Garcia

Box 11 continues on next page...
Box 11 continued from previous page.

LE HENANFF  becomes  Le Henanff
HALLEY DES FONTAINES  becomes  Halley des Fontaines

- When the name of an organization is provided in all capital letters, capitalize proper nouns, proper adjectives, acronyms, initialisms, and other significant words in an organization name and lowercase articles, conjunctions, and prepositions, such as of, the, at, in

THE BOARD OF TRUSTEES OF THE UNIVERSITY OF MICHIGAN  becomes  The Board of Trustees of the University of Michigan

Box 12. Surnames with hyphens and other punctuation in them.

- Keep hyphens in surnames
  Estelle Palmer-Canton  becomes  Palmer-Canton E
  Ahmed El-Assmy  becomes  El-Assmy A

- Keep particles, such as O’, D’, and L’
  Alan D. O’Brien  becomes  O’Brien AD
  James O. L’Esperance  becomes  L’Esperance JO
  U. S’adeh  becomes  S’adeh U

- Omit all other punctuation in surnames
  Charles A. St. James  becomes  St James CA

Box 13. Other surname rules.

- Keep prefixes in surnames
  Lama Al Bassit  becomes  Al Bassit L
  Jiddeke M. van de Kamp  becomes  van de Kamp JM
  Gerard de Pouvourville  becomes  de Pouvourville G

- Keep compound surnames even if no hyphen appears
  Sergio Lopez Moreno  becomes  Lopez Moreno S
  Jaime Mier y Teran  becomes  Mier y Teran J

Box 13 continues on next page...
Box 13 continued from previous page.

Virginie Halley des Fontaines becomes Halley des Fontaines V

- Ignore diacritics, accents, and special characters in names. This rule ignores some conventions used in non-English languages to simplify rules for English-language publications.
  - Treat letters marked with diacritics or accents as if they are not marked
    - Å treated as A
    - Ø treated as O
    - Ç treated as C
    - Ł treated as L
    - à treated as a
    - ĝ treated as g
    - ñ treated as n
    - ü treated as u
  - Treat two or more letters printed as a unit (ligated letters) as if they are two letters
    - æ treated as ae
    - œ treated as oe

Box 14. Given names containing punctuation, a prefix, a preposition, or particle.

- Disregard hyphens joining given (first or middle) names
  - Jean-Louis Lagrot becomes Lagrot JL

- Use only the first letter of given names and middle names if they contain a prefix, a preposition, or another particle
  - D’Arcy Hart becomes Hart D
  - W. St. John Patterson becomes Patterson WS
  - De la Broquerie Fortier becomes Fortier D
  - Craig McC. Brooks becomes Brooks CM

Box 14 continues on next page...
Box 14 continued from previous page.

- Disregard traditional abbreviations of given names. Some non-US publications use abbreviations of conventional given names rather than single initials, such as St. for Stefan. Use only the first letter of the abbreviation.

  Ch. Wunderly becomes Wunderly C
  C. Fr. Erdman becomes Erdman CF

- For non-English names that have been romanized (written in the roman alphabet), capitalize only the first letter if the original initial is represented by more than one letter

  Iu. A. Iakontov becomes Iakontov IuA
  G. Th. Tsakalos becomes Tsakalos GTh

Box 15. Designations of rank in a family, such as Jr and III.

- Place family designations of rank after the initials, without punctuation

- Convert roman numerals to arabic ordinals

  Examples:

  Vincent T. DeVita, Jr. becomes DeVita VT Jr
  James G. Jones II becomes Jones JG 2nd
  John A. Adams III becomes Adams JA 3rd
  Henry B. Cooper IV becomes Cooper HB 4th

Box 16. Degrees, titles, and honors before or after a personal name.

- Omit rank and honors such as Dr. or Sir that precede a name

  Prof. Dr. Eberhard Stennert becomes Stennert E
  Sir Frances Hildebrand becomes Hildebrand F

- Omit degrees, titles, and honors such as M.D. following a personal name

  James A. Reed, M.D., F.R.C.S. becomes Reed JA
  Kristine Schmidt, Ph.D. becomes Schmidt K
Box 17. Non-English names for assignee.

- Translate the word found for assignee into English. However, the wording found on the publication may always be used.

- Ignore diacritics, accents, and special characters in names. This rule ignores some conventions used in non-English languages to simplify rules for English-language publications.
  - Treat letters marked with diacritics or accents as if they are not marked:
    - Å treated as A
    - Ø treated as O
    - Ç treated as C
    - Ł treated as Ł
    - à treated as a
    - ġ treated as g
    - ņ treated as n
    - ü treated as u
  - Treat two or more letters printed as a unit (ligated letters) as if they are two letters:
    - æ treated as ae
    - œ treated as oe

- To assist in identifying the assignee, below is a brief list of non-English words for assignee:

<table>
<thead>
<tr>
<th>Language</th>
<th>Name for Assignee</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>demandeur</td>
</tr>
<tr>
<td></td>
<td>titulaire</td>
</tr>
<tr>
<td>German</td>
<td>Anmelder</td>
</tr>
<tr>
<td>Italian</td>
<td>richiedente</td>
</tr>
<tr>
<td>Russian</td>
<td>zayavitel</td>
</tr>
<tr>
<td>Spanish</td>
<td>solicitante</td>
</tr>
</tbody>
</table>
Box 18. Names in non-roman alphabets (Cyrillic, Greek, Arabic, Hebrew, Korean) or character-based languages (Chinese, Japanese).

- Romanization, a form of transliteration, means using the roman (Latin) alphabet to represent the letters or characters of another alphabet. A good authority for romanization is the ALA-LC Romanization Tables.

- Romanize names in Cyrillic (Russian, Bulgarian, etc.), Greek, Arabic, Hebrew, Korean, or character-based languages, such as Chinese and Japanese

- Capitalize only the first letter of romanized names if the original initial is represented by more than one letter
  
  Iu. A. Iakontov becomes Iakontov IuA
  G. Th. Tsakalos becomes Tsakalos GTh

- Ignore diacritics, accents, and special characters in names. This rule ignores some conventions used in non-English languages to simplify rules for English-language publications.
  
  - Treat letters marked with diacritics or accents as if they are not marked
    
    Å treated as A
    Ø treated as O
    Ç treated as C
    Ł treated as L
    à treated as a
    ġ treated as g
    ň treated as n
    ü treated as u

  - Treat two or more letters printed as a unit (ligated letters) as if they are two letters
    
    æ treated as ae
    œ treated as oe

Box 19. Organizations as assignee.

An organization such as a university, society, association, corporation, or governmental body often serves as an assignee.

Box 19 continues on next page...
Box 19 continued from previous page.

- Give the name of the organization as it appears on the title page of the patent, using whatever abbreviations and punctuation are found.
- Do not omit any words or abbreviate any words that are not already abbreviated.
- Ignore diacritics, accents, and special characters in names. This rule ignores some conventions used in non-English languages to simplify rules for English-language publications.

  - Treat letters marked with diacritics or accents as if they are not marked:
    - Å treated as A
    - Ø treated as O
    - Ç treated as C
    - Ł treated as L
    - à treated as a
    - ą treated as a
    - ę treated as e
    - ñ treated as n
    - ü treated as u

  - Treat two or more letters printed as a unit (ligated letters) as if they are two letters:
    - æ treated as ae
    - œ treated as oe

Examples:

- The Dow Chemical Company
- Boston Scientific Limited
- Boehringer Ingelheim Pharma GmBH & Co. KG
- Matsushita Electric Industrial Co., Ltd.
- The Board of Trustees of the University of Illinois
- The United States of America as represented by the Department of Health and Human Services
Box 20. Both individuals and organizations as assignee.

- Give the names in the order in which they appear on the patent title page.

Examples:

Mazurik SM, Sokolov A, inventors; Mazurik SM, Sokolov A, Poltavsky Meditsinsky Stomatologichesky Institut, assignee.


Box 21. Options for assignee names.

The following format is not NLM practice for citing names of assignee, but is an acceptable option:

- Full first names of the assignee may be given. Separate the surname from the given name or initials by a comma; follow initials with a period; separate successive names by a semicolon.

  Takagi, Yasushi; Harada, Jun, assignee.

  Mann, Frederick D.; Swartz, Mary N.; Little, R.T., assignee.

Examples for Author (assignee)

1. Standard US patent
3. Patent in which an inventor is also an assignee
5. Patent with more than one assignee
6. Patent with the US government as the assignee
7. Patent with affiliation of inventor(s) and assignee included

Author Affiliation for Patents (optional)

General Rules for Author Affiliation

- Enter the affiliation of all inventors and assignee or only the first one
- Begin with the name of the city, if given
- Follow US and Canadian cities with the two-letter abbreviation for the state or province (see Appendix E)
- Follow cities in other countries with the name of the country, either as the two-letter ISO country code (see Appendix D) or written out in full
- Use commas to separate parts of the address
• Place the address in parentheses, such as (Pittsburgh, PA), (Berlin, DE), and (France)
• End affiliation information with a comma placed outside the closing parenthesis

Specific Rules for Author Affiliation

• Names for cities and countries not in English

Box 22. Names for cities and countries not in English.

Patents are required to list the country of the inventors, usually in the form of the two-letter ISO country code (see Appendix D). Many also include the city.

• Begin with the name of the city, if found. Use the English form for names whenever possible. However, the name as found on the publication may always be used.
  
  Moskva  becomes  Moscow
  Wien  becomes  Vienna

• Follow the city name with a comma, a space, and either the ISO country code (see Appendix D) or the country name written out, such as Bern, CH or Bern, Switzerland

• Place the city and country names in parentheses
  
  (Bern, CH) or (Bern, Switzerland)

Examples:


Nilsson H (DK), Lange BH (DK), Post C (DK), Nielsen TG (DK), inventors; Gastrotech Pharma AS (DK), Nilsson H (DK), Lange BH (DK), Post C (DK), Nielsen TG (DK), assignee.

Examples for Author Affiliation

7. Patent with affiliation of inventor(s) and assignee included

Title for Patents (required)

General Rules for Title

• Enter the title of a patent as it appears in the original document, in the original language
- Capitalize only the first word of a title, proper nouns, proper adjectives, acronyms, and initialisms
- Follow non-English titles with a translation whenever possible; place the translation in square brackets
- End a title with a period

**Specific Rules for Title**

- Titles not in English
- Titles containing a Greek letter, chemical formula, or another special character

**Box 23. Titles not in English.**

- Provide the title in the original language for non-English titles in the roman alphabet (primarily European languages, such as French, German, Spanish, Italian, Swedish, etc.)
  

- Romanize (write in the roman alphabet) titles if they are in Cyrillic, Greek, Arabic, Hebrew, or Korean. A good authority for romanization is the [ALA-LC Romanization Tables](#).
  

- Romanize or translate titles in character-based languages (Chinese, Japanese). Place translated titles in square brackets
  

- Ignore diacritics, accents, and special characters in titles. This rule ignores some conventions used in non-English languages to simplify rules for English-language publications.
  
  - Treat letters marked with diacritics or accents as if they are not marked
    
    Å  treated as  A
    
    Ø  treated as  O
Box 23 continued from previous page.

- Treat two or more letters printed as a unit (ligated letters) as if they are two letters
  - æ treated as ae
  - œ treated as oe

- Provide an English translation after the original language one if possible. Place translations in square brackets.


Box 24. Titles containing a Greek letter, chemical formula, or another special character.

- Capitalize the first word of a patent title unless the title begins with a Greek letter, chemical formula, or another special character that might lose its meaning if capitalized

Box 24 continued from previous page.


- If a title contains a Greek letter or some other symbol that cannot be reproduced with the type fonts available, substitute the name for the symbol. For example, \( \Omega \) becomes omega.


or


- If a title contains superscripts or subscripts that cannot be reproduced with the type fonts available, place the superscript or subscript in parentheses


or


Examples for Title

8. Non-US patent written in the roman alphabet

9. Non-US patent written in Cyrillic, Greek, Arabic, Hebrew, or Korean


11. Non-US patent, with translation

12. Patent title containing a Greek letter, chemical formula, or another special character

13. Patent title containing a superscript or subscript
14. Patent in a microform

**Type of Medium for Patents (required)**

**General Rules for Type of Medium**

- Indicate the type of medium (microfiche, ultrafiche, microfilm, microcard, etc.) following the title when a patent is published in a microform
- Place the name of the medium in square brackets and end with a period, such as "[microfiche]."
- Add information about the medium according to the instructions under Physical Description below

**Specific Rules for Type of Medium**

- Titles not in English

**Box 25. Titles not in English.**

- If a translation of a title is provided, place the translation after the original title and place it in square brackets
  

- If a patent is in a microform (microfiche, microfile, microcard, etc.), place the specific name of the microform within square brackets following the translation
  

**Examples for Type of Medium**

14. Patent in a microform

**Patent Country (required)**

**General Rules for Patent Country**

- Name the country issuing the patent
- Use the adjectival form of the name, such as French and Russian, but use United States and United Kingdom
- End place information with a space

**Specific Rules for Patent Country**

- Regional office rather than an individual country
**Box 26. Regional office rather than an individual country.**

Regional offices are designated by the World Intellectual Property Organization (WIPO). The chart below is abstracted from the Handbook on Industrial Property Information and Documentation at WIPO Web site.

- Use the patent designation in the last column when citing a patent from a regional office.

<table>
<thead>
<tr>
<th>Office</th>
<th>Abbreviation</th>
<th>Patent Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Regional Intellectual Property Organization</td>
<td>ARIPO</td>
<td>African Regional Intellectual Property patent</td>
</tr>
<tr>
<td>Benelux Designs Office</td>
<td>BBDM</td>
<td>Benelux patent</td>
</tr>
<tr>
<td>Eurasian Patent Organization</td>
<td>EAPO</td>
<td>Eurasian patent</td>
</tr>
<tr>
<td>European Patent Organisation</td>
<td>EPO</td>
<td>European patent</td>
</tr>
<tr>
<td>World Intellectual Property Organization</td>
<td>WIPO</td>
<td>World patent</td>
</tr>
</tbody>
</table>

*Example:*


**Examples for Patent Country**

1. Standard US patent
15. Patent issued by a regional office
16. Patent issued by WIPO

**Patent Document Type (required)**

**General Rules for Patent Document Type**

- Use whatever specific document type is found on the publication
- For US patents, simply use the word patent
- End type information with a space

**Specific Rules for Patent Document Type**

- Document types for non-US patents
**Box 27. Document types for non-US patents.**

Countries other than the US often indicate a specific type of patent document. For example, in Germany the word Offenlegungsschrift indicates a patent application, Auslegeschrift an examined patent, and Patentschrift a final issued patent.

Simply the word patent may be used for a final issued patent from all countries. However, if the language is unfamiliar or the status of the patent document is unclear, use the wording found on the document.

*Examples:*


**Examples for Patent Document Type**

17. Non-US patent with specific type of document given

**Country Code for Patents (required)**

**General Rules for Country Code**

- Use the two-letter ISO code for the country (see Appendix D)
- Follow the code with a space

**Specific Rules for Country Code**

- Regional office rather than an individual country

**Box 28. Regional office rather than an individual country.**

Regional offices are designated by the World Intellectual Property Organization (WIPO). The chart below is abstracted from the Handbook on Industrial Property Information and Documentation at WIPO Web site.

- Use the patent code in the last column when citing a patent from a regional office.

*Box 28 continues on next page...*
Box 28 continued from previous page.

<table>
<thead>
<tr>
<th>Office</th>
<th>Abbreviation</th>
<th>Patent Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Intellectual Property Organization</td>
<td>OAPI</td>
<td>OA</td>
</tr>
<tr>
<td>African Regional Intellectual Property Organization</td>
<td>ARlPO</td>
<td>AP</td>
</tr>
<tr>
<td>Benelux Designs/Trademark Office</td>
<td>BBDM</td>
<td>BX</td>
</tr>
<tr>
<td>Eurasian Patent Organization</td>
<td>EAPO</td>
<td>EA</td>
</tr>
<tr>
<td>European Patent Organisation</td>
<td>EPO</td>
<td>EP</td>
</tr>
<tr>
<td>Patent Office of the Cooperation Council for the Arab States of the Gulf</td>
<td>GCC</td>
<td>GC</td>
</tr>
<tr>
<td>World Intellectual Property Organization</td>
<td>WIPO</td>
<td>WO</td>
</tr>
</tbody>
</table>

*Example:*


**Examples for Country Code**

1. Standard US patent

15. Patent issued by a regional office

16. Patent issued by WIPO

23. Regional or world patent listing countries that recognize it using ISO country codes

25. Optional brief patent citation format

**Patent Number (required)**

**General Rules for Patent Number**

- Record the patent number as it appears on the publication, using whatever spacing and punctuation are found
- End the patent number with a period

**Specific Rules for Patent Number**

- Letters following patent numbers
- Optional brief patent citation format
Box 29. Letters following patent numbers.

- A letter or a letter and a number combination at the end of a patent number often indicate the kind of patent document. For example, the letter A usually indicates a patent application. Always include any letter accompanying a patent document number.

  Examples:
  
  DD 295717 A5
  EP 0 673 422 B1

Box 30. Optional brief patent citation format.

The following format is not NLM practice for citing patents, but is an acceptable option:

- Begin with the two-letter ISO code (see Appendix D) for the country
- Follow the code with a space, the word patent, and a space
- Record the patent number as it appears on the publication, using whatever spacing and punctuation are found
- Follow the number with a period and a space
- Enter the date of publication in the format year month day
- End the citation with a period

  Examples:
  

Examples for Patent Number

1. Standard US patent
15. Patent issued by a regional office
16. Patent issued by WIPO
23. Regional or world patent listing countries that recognize it using ISO country codes
25. Optional brief patent citation format
Date Issued for Patents (required)

General Rules for Date Issued

- Begin with the year of publication
- Follow the year with the month and day of publication, such as 2004 May 10
- Use English names for months and abbreviate them to the first three letters, such as Jan
- End date information with a period

Specific Rules for Date Issued

- Non-US forms for dates

Box 31. Non-US forms for dates.

- Dates in US patents appear in the format month day, year. For example: August 23, 2005.
- Dates in other countries may appear in patents in a variety of formats
  
  2004/12/02
  30.07.2004
  2004-10-02
  14 June 2004
  15/06/2005

- Enter the year first, then the month and the day, regardless of the format found
  
  August 23, 2005  becomes  2005 Aug 23
  2004/12/02  becomes  2004 Dec 2
  30.07.2004  becomes  2004 Jul 30
  2004-10-02  becomes  2004 Oct 2
  14 June 2004  becomes  2004 Jun 14
  15/06/2005  becomes  2005 Jun 15

- Translate names of months into English and abbreviate them using the first three letters
  
  mayo = May

Box 31 continues on next page...
Box 31 continued from previous page.

luty = Feb
brezen = Mar

Example:
22 Marz 2002  becomes  2002 Mar 22

Examples for Date Issued

1. Standard US patent
25. Optional brief patent citation format

Pagination for Patents (optional)

General Rules for Pagination

- Provide the total number of pages on which the text of the patent appears
- Follow the page total with a space and the letter p
- End pagination information with a period

Specific Rules for Pagination

- No numbers appear on the pages of the patent

Box 32. No numbers appear on the pages of the patent.

Occasionally, a patent will have no numbers on its pages.

- Count the total number of pages of the text
- Express the total as leaves, not pages
- End with a period

Example:
8 leaves.

Examples for Pagination

18. Patent with optional number of pages included
Physical Description for Patents (optional)

General Rules for Physical Description

• Give information on the physical characteristics if a patent is published in a microform (microfilm, microfiche, etc.), such as 3 microfiche: black & white, 2 x 4 in. Such information will help the reader select the appropriate equipment with which to view the microform.

Specific Rules for Physical Description

• Language for describing physical characteristics

Box 33. Language for describing physical characteristics.

If a patent is published on microfiche, microfilm, or microcards:

• Begin with the number and type of physical pieces, followed by a colon and a space
  5 microfiche:
  2 reels: [of microfilm]
  3 microcards:

• Enter information on the physical characteristics, such as color and size. Abbreviate common words for measurement, such as in. for inches and mm. for millimeters. Separate types of information by commas.

  Typical words used include:

  color
  black & white
  positive
  negative
  4 x 6 in. (standard microfiche size)
  3 x 5 in. (standard microcard size)
  35 mm. (a standard microfilm size)
  16 mm. (a standard microfilm size)

  Examples of complete physical description statements:

  3 microfiche: color, positive, 4 x 6 in.

Box 33 continues on next page...
Box 33 continued from previous page.

5 microcards: black & white, 3 x 5 in.
1 reel: black& white, negative, 35 mm.

Examples for Physical Description

14. Patent in a microform

International Classification Code for Patents (optional)

General Rules for International Classification Code

• Abbreviate International Classification Code to "Int. Cl." and follow it with a space
• Enter the International Classification Code number or numbers in the order found on the patent
• Separate multiple classification numbers by a semicolon and a space
• End the list with a period

Examples for International Classification Code

19. Patent with International Classification Code included

Country Classification Code for Patents (optional)

General Rules for Country Classification Code

• Begin with the two-letter ISO code (see Appendix D) for the country issuing the patent, followed by a space
• Follow the country code with the abbreviation "Cl." and a space, such as "US Cl."
• Enter the classification number or numbers assigned to the patent by the country in the order found on the patent
• Separate multiple classification numbers by a semicolon and a space
• End the list with a period

Examples for Country Classification Code

20. Patent with classification codes of the country granting it

Application Number and Filing Date for Published Patents (optional)

General Rules for Application Number and Filing Date

• Abbreviate application number to Appl. No. and end it with a colon and a space
• Enter the application number followed by a semicolon and a space
• Give the filing date in the format year month day, as 2006 May 3
• End the date with a period
• To cite a patent application for unpublished patents, see Patent Applications below
Examples for Application Number and Filing Date

21. Patent application number and date for published patents

Language for Patents (required)

General Rules for Language

- Give the language of publication if other than English
- Capitalize the language name
- Follow the language name with a period

Examples for Language

8. Non-US patent written in the roman alphabet
9. Non-US patent written in Cyrillic, Greek, Arabic, Hebrew, or Korean
11. Non-US patent, with translation

Notes for Patents (optional)

General Rules for Notes

- Notes is a collective term for any type of useful information given after the citation itself
- Complete sentences are not required
- Be brief

Specific Rules for Notes

- Related and cited patents
- Countries that recognize a regional or world patent
- Other types of material to include in notes

**Box 34. Related and cited patents.**

List the patent numbers included in the patent as related and/or as cited.

- For related patent numbers
  - Begin with the phrase "Related US patents" followed by a colon and a space, substituting the appropriate ISO country code (see Appendix D) for non-US patents
  - Enter the patent numbers in the order given in the patent
  - Separate numbers by a semicolon and a space
  - End the list with a period

*Box 34 continues on next page...*
Box 34 continued from previous page.

- Repeat the steps above for the numbers of additional countries

- For cited patent numbers:
  - Begin with the phrase "Cited US patents" followed by a colon and a space, substituting the appropriate ISO country code (see Appendix D) for non-US patents
  - Enter the patent numbers in the order given in the patent
  - Separate numbers by a semicolon and a space
  - End the list with a period
  - Repeat the steps above for the numbers of additional countries

*Example:*

Co MS (Cupertino, CA), Scheinberg DA (New York, NY), Queen CL (Los Altos, CA), inventors; Protein Design Labs, Inc. (Fremont, CA); Memorial Sloan Kettering Cancer Center (New York, NY), assignee. Increasing antibody affinity by altering glycosylation of immunoglobulin variable region. United States patent US 6,933,368. 2005 Aug 23. Related US patents: 6,350,861; 5,714,350. Cited US patents: 5,147,637; 5,714,350; 5,730,982; 5,821,337; 6,054,297; 6,218,149; 6,350,861. Cited EP patents: 0 239 400; 0 438 312. Cited WO patents: 90/07861; 92/22653; 03/016466.

Box 35. **Countries that recognize a regional or world patent.**

List the countries that recognize a regional or world patent.

- Begin with the phrase "Recognized by" followed by a colon and a space
- Use the two-letter ISO country code (see Appendix D) for each country
- Place the country codes in alphabetical order
- Separate codes by a comma and a space
- End the list with a period

*Examples:*

Box 35 continued from previous page.


Box 36. Other types of material to include in notes.

- Give any other information that may be useful to the reader, such as any grant numbers or other sponsorship information of the work that led to the patent.


Examples for Notes

22. Patent with lists of related and/or cited patents

23. Regional or world patent listing countries that recognize it using ISO country codes

24. Other notes for patents

Patent Applications

General Rules for Patent Applications

- Cite the patent application using the rules above
- Insert the word application between the word patent and the country code, such as UK patent application GB 2 146 419 A
- Be sure to include any letters that follow or precede the number
- Follow the patent application number with a period and a space
- Give the application date in the format year month day, as 2006 May 3
- End the date with a period

Specific Rules for Patent Applications

- Non-US names for applications
- Non-US forms for dates
Box 37. Non-US names for applications.

Countries other than the US often use a specific type of patent document rather than the word application. For example, in Germany the word Offenlegungsschrift indicates a patent application.

Simply the word application may be used for all countries to designate that a final patent has not been issued. However, if the language is unfamiliar or the status of the patent document is unclear, use the wording found on the document.

Examples:


Box 38. Non-US forms for dates.

• Dates in US patents appear in the format month day, year. For example, August 23, 2005.

• Dates in other countries may appear in patents in a variety of formats

  2004/12/02
  30.07.2004
  2004-10-02
  14 June 2004
  15/06/2005

• Enter the year first, then the month and the day, regardless of the format found

  2004/12/02  becomes  2004 Dec 2
  30.07.2004  becomes  2004 Jul 30
  2004-10-02  becomes  2004 Oct 2
  14 June 2004  becomes  2004 Jun 14
  15/06/2005  becomes  2005 Jun 15

• Translate names of months into English and abbreviate them using the first three letters

Box 38 continues on next page...
Examples for Patent Applications

26. Patent applications before issuance of the patent

Examples of Citations to Patents

1. Standard US patent


2. US patent with optional full names for inventor(s)


3. Patent in which an inventor is also an assignee


4. Patent in which an organization is the inventor


5. Patent with more than one assignee
Co MS, Scheinberg DA, Queen CL, inventors; Protein Design Labs, Inc.; Memorial Sloan Kettering Cancer Center, assignee. Increasing antibody affinity by altering glycosylation of immunoglobulin variable region. United States patent US 6,933,368. 2005 Aug 23.

6. Patent with the US government as the assignee

7. Patent with affiliation of inventor(s) and assignee included

Co MS (Cupertino, CA), Scheinberg DA (New York, NY), Queen CL (Los Altos, CA), inventors; Protein Design Labs, Inc. (Fremont, CA); Memorial Sloan Kettering Cancer Center (New York, NY), assignee. Increasing antibody affinity by altering glycosylation of immunoglobulin variable region. United States patent US 6,933,368. 2005 Aug 23.

8. Non-US patent written in the roman alphabet

McMullen JN, inventor; Universite de Montreal, assignee. Controlled release tablet. Canadian patent CA 1314216.1993 Mar 9.


9. Non-US patent written in Cyrillic, Greek, Arabic, or Hebrew

11. Non-US patent, with translation


12. Patent title containing a Greek letter, chemical formula, or another special character


or


or
13. Patent title containing a superscript or subscript


or


14. Patent in a microform


15. Patent issued by a regional office


16. Patent issued by WIPO


17. Non-US patent with specific type of document given


18. Patent with optional number of pages included

19. Patent with International Classification Code included


20. Patent with classification codes of the country granting it


Wang RF (Bethesda, MD), Rosenberg S (Potomac, MD), inventors; The United States of America as represented by the Department of Health and Human Services (Washington, DC), assignee. Cancer peptides of NY-ESO-1/CAG-3. United States patent US 7,084,239. 2006 Aug 1. Int. Cl. A61K 38/00; C07K 7/04; C07K 7/06; C07K 7/08; A61K 38/04; C07H 21/04; C07K 16/00; C12P 21/06. US Cl. 530/300; 424/184.1; 424/185.1; 530/326; 530/327; 530/328.

21. Patent application number and date for published patents


22. Patent with lists of related and/or cited patents

Co MS (Cupertino, CA), Scheinberg DA (New York, NY), Queen CL (Los Altos, CA), inventors; Protein Design Labs, Inc. (Fremont, CA); Memorial Sloan Kettering Cancer
23. Regional or world patent listing countries that recognize it using ISO country codes


24. Other notes for patents


25. Optional brief patent citation format


26. Patent applications before issuance of the patent

Sitte E, Kleber H, inventors; C Reichart Optische Werke AG, assignee. Apparatus for cooling a biological or medical specimen. UK patent application GB 2 146 419 A. 1984 Sep 4.
