

Numeric identifier	Definition	Comments and format	Mandatory (M) or optional (O).
<213> .....	Organism .....	Scientific name, <i>i.e.</i> , Genus/ species, Unknown or Artificial Sequence. In addition, the "Unknown" or "Artificial Sequence" organisms shall be further described in the <220>to<223>feature section.	M
<220> .....	Feature .....	Leave blank after <220>. <221-223>provide for a description of points of biological significance in the sequence..	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence; if ORGANISM is "Artificial Sequence" or "Unknown"; if molecule is combined DNA/RNA"
<221> .....	Name/Key .....	Provide appropriate identifier for feature, preferably from WIPO Standard ST.25 (1998), Appendix 2, Tables 5 and 6.	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence.
<222> .....	Location .....	Specify location within sequence; where appropriate state number of first and last bases/amino acids in feature.	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence.
<223> .....	Other Information ...	Other relevant information; four lines maximum.	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence; if ORGANISM is "Artificial Sequence" or "Unknown"; if molecule is combined DNA/RNA.
<300> .....	Publication Information.	Leave blank after <300> .....	O.
<301> .....	Authors .....	Preferably max of ten named authors of publication; specify one name per line; preferable format: Surname, Other Names and/or Initials.	O.
<302> .....	Title .....	.....	O.
<303> .....	Journal .....	.....	O.
<304> .....	Volume .....	.....	O.
<305> .....	Issue .....	.....	O.
<306> .....	Pages .....	.....	O.
<307> .....	Date .....	Journal date on which data published; specify as yyyy-mm-dd, MMM-yyyy or Season-yyyy.	O.
<308> .....	Database Accession Number.	Accession number assigned by database including database name.	O.
<309> .....	Database Entry Date.	Date of entry in database; specify as yyyy-mm-dd or MMM-yyyy.	O.
<310> .....	Patent Document Number.	Document number; for patent-type citations only. Specify as, for example, US 07/999,999.	O.
<311> .....	Patent Filing Date ...	Document filing date, for patent-type citations only; specify as yyyy-mm-dd.	O.
<312> .....	Publication Date .....	Document publication date, for patent-type citations only; specify as yyyy-mm-dd.	O.
<313> .....	Relevant Residues	FROM (position) TO (position) .....	O.
<400> .....	Sequence .....	SEQ ID NO should follow the numeric identifier and should appear on the line preceding the actual sequence.	M.

[63 FR 29636, June 1, 1998, as amended at 65 FR 54681, Sept. 8, 2000; 68 FR 38630, June 30, 2003]

**§ 1.824 Form and format for nucleotide and/or amino acid sequence submissions in computer readable form.**

(a) The computer readable form required by §1.821(e) shall meet the following requirements:

(1) The computer readable form shall contain a single "Sequence Listing" as either a diskette, series of diskettes, or

other permissible media outlined in paragraph (c) of this section.

(2) The "Sequence Listing" in paragraph (a)(1) of this section shall be submitted in American Standard Code for Information Interchange (ASCII) text. No other formats shall be allowed.

(3) The computer readable form may be created by any means, such as word

processors, nucleotide/amino acid sequence editors' or other custom computer programs; however, it shall conform to all requirements detailed in this section.

(4) File compression is acceptable when using diskette media, so long as the compressed file is in a self-extracting format that will decompress on one of the systems described in paragraph (b) of this section.

(5) Page numbering must not appear within the computer readable form version of the "Sequence Listing" file.

(6) All computer readable forms must have a label permanently affixed there-to on which has been hand-printed or typed: the name of the applicant, the title of the invention, the date on which the data were recorded on the computer readable form, the operating system used, a reference number, and an application number and filing date, if known. If multiple diskettes are submitted, the diskette labels must indicate their order (e.g., "1 of X").

(b) Computer readable form submissions must meet these format requirements:

(1) Computer Compatibility: IBM PC/XT/AT or Apple Macintosh;

(2) Operating System Compatibility: MS-DOS, MS-Windows, Unix or Macintosh;

(3) Line Terminator: ASCII Carriage Return plus ASCII Line Feed; and

(4) Pagnation: Continuous file (no "hard page break" codes permitted).

(c) Computer readable form files submitted may be in any of the following media:

(1) Diskette: 3.50 inch, 1.44 Mb storage; 3.50 inch, 720 Kb storage; 5.25 inch, 1.2 Mb storage; 5.25 inch, 360 Kb storage.

(2) Magnetic tape: 0.5 inch, up to 24000 feet; Density: 1600 or 6250 bits per inch, 9 track; Format: Unix tar command; specify blocking factor (not "block size"); Line Terminator: ASCII Carriage Return plus ASCII Line Feed.

(3) 8mm Data Cartridge: Format: Unix tar command; specify blocking factor (not "block size"); Line Terminator: ASCII Carriage Return plus ASCII Line Feed.

(4) Compact disc: Format: ISO 9660 or High Sierra Format.

(5) Magneto Optical Disk: Size/Storage Specifications: 5.25 inch, 640 Mb.

(d) Computer readable forms that are submitted to the Office will not be returned to the applicant.

[65 FR 54681, Sept. 8, 2000]

**§ 1.825 Amendments to or replacement of sequence listing and computer readable copy thereof.**

(a) Any amendment to a paper copy of the "Sequence Listing" (§1.821(c)) must be made by the submission of substitute sheets and include a statement that the substitute sheets include no new matter. Any amendment to a compact disc copy of the "Sequence Listing" (§1.821(c)) must be made by the submission of a replacement compact disc (2 copies) in compliance with §1.52(e). Amendments must also be accompanied by a statement that indicates support for the amendment in the application, as filed, and a statement that the replacement compact disc includes no new matter.

(b) Any amendment to the paper or compact disc copy of the "Sequence Listing," in accordance with paragraph (a) of this section, must be accompanied by a substitute copy of the computer readable form (§1.821(e)) including all previously submitted data with the amendment incorporated therein, accompanied by a statement that the copy in computer readable form is the same as the substitute copy of the "Sequence Listing."

(c) Any appropriate amendments to the "Sequence Listing" in a patent; e.g., by reason of reissue or certificate of correction, must comply with the requirements of paragraphs (a) and (b) of this section.

(d) If, upon receipt, the computer readable form is found to be damaged or unreadable, applicant must provide, within such time as set by the Director, a substitute copy of the data in computer readable form accompanied by a statement that the substitute data is identical to that originally filed.

[63 FR 29638, June 1, 1998, as amended at 65 FR 54681, Sept. 8, 2000]