U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

CLASSIFICATION ORDER 1862

JUNE 5, 2007

PROJECT Y-7121

The following classification changes will be effected by this order:

	Class	**Subclass**	**Art Unit**	**Ex'r Search Room**
Abolished:	None			
Established:	707	E-Subclasses: E17.001-E17.009, E17.01, E17.011-E17.019, E17.02, E17.021-E17.029, E17.03, E17.031-E17.039, E17.04, E17.041-E17.049, E17.05, E17.051-E17.059, E17.06, E17.061-E17.069, E17.07, E17.071-E17.079, E17.08, E17.081-E17.089, E17.09, E17.091-E17.099, E17.1, E17.101-E17.109, E17.11, E17.111-E17.119, E17.12, E17.121-E17.129, E17.13, E17.131-E17.139, E17.14, E17.141-E17.143	2161	Not Applicable

No other classes were impacted by this order.

This order includes the following:

A.   CLASSIFICATION MANUAL CHANGES

D.   DEFINITION CHANGES AND NEW OR ADDITIONAL DEFINITIONS

CLASSIFICATION ORDER 1862

JUNE 5, 2007

PROJECT Y-7121

Project Leaders: Yen M. Nguyen

Editor: Mildred Chisholm

Editorial Assistant: Yvonne Smith

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

INFORMATION RETRIEVAL; DATABASE
  STRUCTURES THEREFORE (EPO)
.Processing unordered data (EPO)
..Sequential access, e.g., string
    matching, etc. (EPO)

E17.041   ...Comparing simultaneously a plurality
            of search arguments with a simple
            file data, finite state machine
            (EPO)

E17.042   ...Comparing simultaneously search
            arguments with more than one file
            data (EPO)

E17.043   ....Comparing simultaneously search
            arguments with more than one file
            data (EPO)

E17.044   .In structured data stores (EPO)
E17.045   ..Relational databases (EPO)
E17.046   ...Clustering or classification (EPO)
E17.047   ....Including cluster or class
            visualization or browsing (EPO)

E17.048   ...Entity relationship models (EPO)
E17.049   ...Physical indexing structures (EPO)
E17.05   ....Trees, e.g., B+ trees, etc. (EPO)
E17.051   ....Vectors, bitmaps or matrices (EPO)
E17.052   ....Hash tables (EPO)
E17.053   ....Index managing details (EPO)
E17.054   ...Relational operators, e.g., joins,
            transitive closure, partitioning,
            etc. (EPO)

E17.055   ..Object oriented databases (EPO)
E17.056   ..Multidimensional databases (EPO)
E17.057   ...Indexing (EPO)
E17.058   .Of unstructured textual data (EPO)
E17.059   ..Filtering based on additional data,
            e.g., user or group profiles, etc.
            (EPO)

E17.06   ...Profile generation, learning or
            modification (EPO)

E17.061   ..Querying (EPO)
E17.062   ...Query formulation (EPO)
E17.063   ....Reformulation based on results of
            preceding query (EPO)

E17.064   .....Using relevance feedback from the
             user, e.g., relevance feedback
             on documents, documents sets,
             document terms or passages, etc.
             (EPO)

E17.065   ......Using graphical result space
             presentation or visualization
             (EPO)

E17.066   ....Using system suggestions (EPO)
E17.067   .....Using document space presentation
             or visualization, e.g.,
             category, hierarchy or range
             presentation and selection, etc.
             (EPO)

E17.068   ....Natural language query formulation
             or dialogue systems (EPO)

E17.069   ...Query processing (EPO)
E17.07   ....Query translation (EPO)
E17.071   .....Selection or weighting of terms
             from queries, including natural
             language queries (EPO)

E17.072   .....Syntactic pre-processing steps,
             e.g., stopword elimination,
             stemming, etc. (EPO)

E17.073   .....Translation of the query language,
             e.g., Chinese to English, etc.
             (EPO)

E17.074   .....Query expansion (EPO)
E17.075   ....Query execution (EPO)
E17.076   .....Using Boolean model (EPO)
E17.077   .....Using phonetics (EPO)
E17.078   .....Using natural language analysis
             (EPO)

E17.079   .....Using probabilistic model (EPO)
E17.08   .....Using vector based model (EPO)
E17.081   ....Reuse of stored results of previous
             queries (EPO)

E17.082   ...Presentation or visualization of
             query results (EPO)

E17.083   ..Indexing (EPO)
E17.084   ...Selection or weighting of terms for
             indexing (EPO)

E17.085   ...Physical indexing structures (EPO)
E17.086   ....Inverted lists (EPO)
E17.087   ....Trees (EPO)
E17.088   ....Index managing details (EPO)
E17.089   ..Clustering or classification (EPO)
E17.09   ...Into predefined classes (EPO)
E17.091   ...Including class or cluster creation
             or modification (EPO)

E17.092   ...Including cluster or class
             visualization or browsing (EPO)

E17.093   ..Browsing or visualization (EPO).
E17.094   ...Summarization for human users (EPO)
E17.095   ..Based on associated metadata or manual
             classification, e.g., bibliographic
             data, etc. (EPO)

E17.096   ...Using identifiers, e.g., barcodes,
             radio frequency identifications,
             etc. (EPO)

E17.097   ...Using citations (EPO)
E17.098   ..Creation of semantic tools (EPO)
E17.099   ...Ontology (EPO)
E17.1   ...Thesaurus (EPO)
E17.101   .Of audio data (EPO)
E17.102   ..Based on associated metadata, e.g.,
             bibliographic data, images
             associated with audio data, etc.
             (EPO)

E17.103   ...Wherein the metadata is a transcript
             of the audio data (EPO)

E17.104   .Processing sequentially ordered data,
             e.g., alpha-numerically ordered,
             etc. (EPO)

E17.105   ..Binary access (EPO)
E17.106   ..Sequential access (EPO)
E17.107   .Retrieval from the Internet, e.g.,
             browsers, etc. (EPO)

E17.108   ..By querying, e.g., search engines or
             meta-search engines, crawling
             techniques, push systems, etc.
             (EPO)

E17.109   ...With filtering and personalization
             (EPO)

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

INFORMATION RETRIEVAL; DATABASE
  STRUCTURES THEREFORE (EPO)
.Retrieval from the Internet, e.g.,
  browsers, etc. (EPO)
..By querying, e.g., search engines or
  meta-search engines, crawling
  techniques, push systems, etc.
  (EPO)

E17.11	...Spatially dependent indexing and retrieval, e.g., location dependent results to queries, etc. (EPO)
E17.111	..By navigation, e.g., using categorized browsing, portals, synchronized browsing, visual networks of documents, virtual worlds or tours, etc. (EPO)
E17.112	..By using information identifiers, e.g., encoding URL in specific indicia, browsing history, etc. (EPO)
E17.113	...By using bar codes (EPO)
E17.114	...Bookmark management (EPO)
E17.115	...URL specific, e.g., using aliases, detecting broken or misspelled links, etc. (EPO)
E17.116	..Web site content organization and management, e.g., publishing, automatic linking or maintaining pages, etc. (EPO)
E17.117	...Access to data in other repository systems, e.g., legacy data or dynamic web page generation, etc. (EPO)
E17.118	...Document structures and storage, e.g., HTML extensions, etc. (EPO)
E17.119	..Browsing optimization (EPO)
E17.12	...Of access to content, e.g., by caching, etc. (EPO)
E17.121	...Optimizing the visualization of content, e.g., distillation of HTML documents, etc. (EPO)
E17.122	.Of semistructured data, the underlying structure being taken into account, e.g., mark-up language structure data, etc. (EPO)
E17.123	..Indexing, e.g., of XML tags, etc. (EPO)
E17.124	..Mapping or conversion (EPO)
E17.125	...Mapping to a database (EPO)
E17.126	...Mark-up to mark-up conversion (EPO)
E17.127	..XML native databases, structures and querying (EPO)
E17.128	...Query formulation (EPO)
E17.129	...Query processing (EPO)
E17.13	....Query translation (EPO)
E17.131	....Query optimization (EPO)
E17.132	....Query execution (EPO)
E17.133	...Results presentation (EPO)
E17.134	.Details of database functions independent of the retrieved data type (EPO)
E17.135	..Querying (EPO)
E17.136	...Query formulation (EPO)
E17.137	....Using system suggestions (EPO)
E17.138	.....Using search space presentation or visualization, e.g., category or

range presentation and
  selection, etc. (EPO)

E17.139	....Natural language query formulation or dialogue systems (EPO)
E17.14	...Query processing (EPO)
E17.141	...Presentation or visualization of query results (EPO)
E17.142	..Browsing or visualization (EPO)
E17.143	..Retrieval based on associated metadata (EPO)

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FOREIGN ART COLLECTION

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FOR 000	CLASS-RELATED FOREIGN DOCUMENTS

CLASS 707 – DATA PROCESSING: DATABASE AND FILE MANAGEMENT OR DATA

E-SUBCLASSES

The E-subclasses in U.S. Class 707 provide for digital computing or data processing equipment or methods specially adapted for the retrieval of information data and database structures for such data.

E17.001   **INFORMATION RETRIEVAL; DATABASE STRUCTURES THEREFORE (EPO):**
This group of subclasses provide for digital computing or data processing equipment or methods specially adapted for the retrieval of information and data base structures for such data. This subclass is substantially the same in scope as ECLA classification G06F17/30.

(1)   Note.   This group includes compilation of abstracts.

E17.002   **Data indexing; abstracting; data reduction (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially the same in scope as ECLA classification G06F17/30A.

E17.003   **Of chemical information (EPO):**
This subclass is indented under subclass E17.002. This subclass is substantially the same in scope as ECLA classification G06F17/30A2.

E17.004   **Of images (EPO):**
This subclass is indented under subclass E17.002. This subclass is substantially the same in scope as ECLA classification G06F17/30A3.

E17.005   **Interfaces; database management systems; updating (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially the same in scope as ECLA classification G06F17/30B.

E17.006   **File format conversion (EPO):**
This subclass is indented under subclass E17.005. This subclass is substantially the same in scope as ECLA classification G06F17/30B2.

E17.007   **Concurrency control and recovery (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially the same in scope as ECLA classification G06F17/30C.

E17.008   **Document retrieval systems (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially the same in scope as ECLA classification G06F17/30D.

E17.009   **Information processing systems, e.g., multimedia systems, etc. (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially the same in scope as ECLA classification G06F17/30E.

E17.01   **File systems; file servers (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially
the same in scope as ECLA classification G06F17/30F.

E17.011   **Processing chained data, e.g., graphs, linked lists, etc. (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially
the same in scope as ECLA classification G06F17/30G.

E17.012   **Trees (EPO):**
This subclass is indented under subclass E17.011. This subclass is substantially
the same in scope as ECLA classification G06F17/30G3.

E17.013   **Hypermedia (EPO):**
This subclass is indented under subclass E17.011. This subclass is substantially
the same in scope as ECLA classification G06F17/30G4.

E17.014   **Query processing for the retrieval of structured data (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially
the same in scope as ECLA classification G06F17/30H.

E17.015   **Natural language query interface (EPO):**
This subclass is indented under subclass E17.014. This subclass is substantially
the same in scope as ECLA classification G06F17/30H2.

E17.016   **Menu driven systems; graphical querying; query-by-example (EPO):**
This subclass is indented under subclass E17.014. This subclass is substantially
the same in scope as ECLA classification G06F17/30H4.

E17.017   **Query optimization (EPO):**
This subclass is indented under subclass E17.014. This subclass is substantially
the same in scope as ECLA classification G06F17/30H6**.**

E17.018   **In geographical information databases (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially
the same in scope as ECLA classification G06F17/30L.

E17.019   **In image databases (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially
the same in scope as ECLA classification G06F17/30M.

E17.02   **Based on image content (EPO):**
This subclass is indented under subclass E17.019. This subclass is substantially
the same in scope as ECLA classification G06F17/30M1.

E17.021   **Using color (EPO):**
This subclass is indented under subclass E17.02. This subclass is substantially
the same in scope as ECLA classification G06F17/30M1C.

E17.022   **Using extracted text (EPO):**
This subclass is indented under subclass E17.02. This subclass is substantially
the same in scope as ECLA classification G06F17/30M1E.

E17.023   **Using a combination of image content features (EPO):**
This subclass is indented under subclass E17.02. This subclass is substantially the same in scope as ECLA classification G06F17/30M1H.

E17.024   **Using shape and object relationship (EPO):**
This subclass is indented under subclass E17.02. This subclass is substantially the same in scope as ECLA classification G06F17/30M1S.

E17.025   **Using texture (EPO):**
This subclass is indented under subclass E17.02. This subclass is substantially the same in scope as ECLA classification G06F17/30M1T.

E17.026   **Based on bibliographical data of images (EPO):**
This subclass is indented under subclass E17.019. This subclass is substantially the same in scope as ECLA classification G06F17/30M2.

E17.027   **The images having vectorial formats (EPO):**
This subclass is indented under subclass E17.019. This subclass is substantially the same in scope as ECLA classification G06F17/30M4.

E17.028   **The images being video sequences (EPO):**
This subclass is indented under subclass E17.019. This subclass is substantially the same in scope as ECLA classification G06F17/30M5.

E17.029   **By browsing (EPO):**
This subclass is indented under subclass E17.019. This subclass is substantially the same in scope as ECLA classification G06F17/30M7.

E17.03   **By graphical querying (EPO):**
This subclass is indented under subclass E17.019. This subclass is substantially the same in scope as ECLA classification G06F17/30M8.

E17.031   **Data organization and access thereof (EPO):**
This subclass is indented under subclass E17.019. This subclass is substantially the same in scope as ECLA classification G06F17/30M9.

E17.032   **Using distributed data base systems, e.g., networks, etc. (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially the same in scope as ECLA classification G06F17/30N.

E17.033   **Processing unordered data (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially the same in scope as ECLA classification G06F17/30P.

E17.034   **Random access (EPO):**
This subclass is indented under subclass E17.033. This subclass is substantially the same in scope as ECLA classification G06F17/30P1.

E17.035   **Using parallel associative memories (EPO):**
This subclass is indented under subclass E17.034. This subclass is substantially the same in scope as ECLA classification G06F17/30P1A.

E17.036   **By address calculation or conversion, e.g., hashing etc. (EPO):**
This subclass is indented under subclass E17.034. This subclass is substantially the same in scope as ECLA classification G06F17/30P1C.

E17.037   **Using directory or table look-up (EPO):**
This subclass is indented under subclass E17.034. This subclass is substantially the same in scope as ECLA classification G06F17/30P1D.

E17.038   **Using more than one table in sequence, i.e., systems with three or more layers, etc. (EPO):**
This subclass is indented under subclass E17.037. This subclass is substantially the same in scope as ECLA classification G06F17/30P1D3.

E17.039   **Sequential access, e.g., string matching, etc. (EPO):**
This subclass is indented under subclass E17.033. This subclass is substantially the same in scope as ECLA classification G06F17/30P2.

E17.04   **On static storage (EPO):**
This subclass is indented under subclass E17.039. This subclass is substantially the same in scope as ECLA classification G06F17/30P2S.

E17.041   **Comparing simultaneously a plurality of search arguments with a simple file data, finite state machine (EPO):**
This subclass is indented under subclass E17.039. This subclass is substantially the same in scope as ECLA classification G06F17/30P2A.

E17.042   **Comparing simultaneously search arguments with more than one file data (EPO):**
This subclass is indented under subclass E17.039. This subclass is substantially the same in scope as ECLA classification G06F17/30P2F.

E17.043   **Comparing simultaneously search arguments with more than one file data (EPO):**
This subclass is indented under subclass E17.042. This subclass is substantially the same in scope as ECLA classification G06F17/30P2S9.

E17.044   **In structured data stores (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially the same in scope as ECLA classification G06F17/30S.

E17.045   **Relational databases (EPO):**
This subclass is indented under subclass E17.044. This subclass is substantially the same in scope as ECLA classification G06F17/30S1.

E17.046   **Clustering or classification (EPO):**
This subclass is indented under subclass E17.045. This subclass is substantially the same in scope as ECLA classification G06F17/30S1C.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E17.089, for textual data.

E17.047   **Including cluster or class visualization or browsing (EPO):**
This subclass is indented under subclass E17.046. This subclass is substantially
the same in scope as ECLA classification G06F17/30S1C1.

E17.048   **Entity relationship models (EPO):**
This subclass is indented under subclass E17.045. This subclass is substantially
the same in scope as ECLA classification G06F17/30S1E.

E17.049   **Physical indexing structures (EPO):**
This subclass is indented under subclass E17.045. This subclass is substantially
the same in scope as ECLA classification G06F17/30S1N.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E17.059, for indexing structures for textual data.

E17.05   **Trees, e.g., B+ trees, etc. (EPO):**
This subclass is indented under subclass E17.049. This subclass is substantially
the same in scope as ECLA classification G06F17/30S1N1.

E17.051   **Vectors, bitmaps or matrices (EPO):**
This subclass is indented under subclass E17.049. This subclass is substantially
the same in scope as ECLA classification G06F17/30S1N3.

E17.052   **Hash tables (EPO):**
This subclass is indented under subclass E17.049. This subclass is substantially
the same in scope as ECLA classification G06F17/30S1N5.

E17.053   **Index managing details (EPO):**
This subclass is indented under subclass E17.049. This subclass is substantially
the same in scope as ECLA classification G06F17/30S1N7.

E17.054   **Relational operators, e.g., joins, transitive closure, partitioning, etc. (EPO):**
This subclass is indented under subclass E17.045. This subclass is substantially
the same in scope as ECLA classification G06F17/30S1R.

E17.055   **Object oriented databases (EPO):**
This subclass is indented under subclass E17.044. This subclass is substantially
the same in scope as ECLA classification G06F17/30S3.

E17.056   **Multidimensional databases (EPO):**
This subclass is indented under subclass E17.044. This subclass is substantially
the same in scope as ECLA classification G06F17/30S5.

E17.057   **Indexing (EPO):**
This subclass is indented under subclass E17.056. This subclass is substantially
the same in scope as ECLA classification G06F17/30S5N.

E17.058   **Of unstructured textual data (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially
the same in scope as ECLA classification G06F17/30T.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E17.008, for document management systems.

E17.059 **Filtering based on additional data, e.g., user or group profiles, etc. (EPO):**
This subclass is indented under subclass E17.058. This subclass is substantially the same in scope as ECLA classification G06F17/30T3.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E17.109, for filtering in web context.

E17.06 **Profile generation, learning or modification (EPO):**
This subclass is indented under subclass E17.059. This subclass is substantially the same in scope as ECLA classification G06F17/30T3L.

E17.061 **Querying (EPO):**
This subclass is indented under subclass E17.058. This subclass is substantially the same in scope as ECLA classification G06F17/30T2.

E17.062 **Query formulation (EPO):**
This subclass is indented under subclass E17.061. This subclass is substantially the same in scope as ECLA classification G06F17/30T2F.

E17.063 **Reformulation based on results of preceding query (EPO):**
This subclass is indented under subclass E17.062. This subclass is substantially the same in scope as ECLA classification G06F17/30T2F2.

E17.064 **Using relevance feedback from the user, e.g., relevance feedback on documents, documents sets, document terms or passages, etc. (EPO):**
This subclass is indented under subclass E17.063. This subclass is substantially the same in scope as ECLA classification G06F17/30T2F2R.

E17.065 **Using graphical result space presentation or visualization (EPO):**
This subclass is indented under subclass E17.064. This subclass is substantially the same in scope as ECLA classification G06F17/30T2F2R1.

E17.066 **Using system suggestions (EPO):**
This subclass is indented under subclass E17.062. This subclass is substantially the same in scope as ECLA classification G06F17/30T2F1.

E17.067 **Using document space presentation or visualization, e.g., category, hierarchy or range presentation and selection, etc. (EPO):**
This subclass is indented under subclass E17.066. This subclass is substantially the same in scope as ECLA classification G06F17/30T2F1V.

E17.068 **Natural language query formulation or dialogue systems (EPO):**
This subclass is indented under subclass E17.062. This subclass is substantially the same in scope as ECLA classification G06F17/30T2F4.

E17.069 **Query processing (EPO):**
This subclass is indented under subclass E17.061. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P.

E17.07 **Query translation (EPO):**
This subclass is indented under subclass E17.069. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P2.

E17.071 **Selection or weighting of terms from queries, including natural language
queries (EPO):**
This subclass is indented under subclass E17.07. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P2E.

E17.072 **Syntactic pre-processing steps, e.g., stopword elimination, stemming, etc.
(EPO):**
This subclass is indented under subclass E17.07. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P2S.

E17.073 **Translation of the query language, e.g., Chinese to English, etc. (EPO):**
This subclass is indented under subclass E17.07. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P2T.

E17.074 **Query expansion (EPO):**
This subclass is indented under subclass E17.07. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P2X.

E17.075 **Query execution (EPO):**
This subclass is indented under subclass E17.069. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P4.

E17.076 **Using Boolean model (EPO):**
This subclass is indented under subclass E17.075. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P4B.

E17.077 **Using phonetics (EPO):**
This subclass is indented under subclass E17.075. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P4F.

E17.078 **Using natural language analysis (EPO):**
This subclass is indented under subclass E17.075. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P4N.

E17.079 **Using probabilistic model (EPO):**
This subclass is indented under subclass E17.075. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P4P.

E17.08 **Using vector based model (EPO):**
This subclass is indented under subclass E17.075. This subclass is substantially
the same in scope as ECLA classification G06F17/30T2P4V.

E17.081 **Reuse of stored results of previous queries (EPO):**
      This subclass is indented under subclass E17.069. This subclass is substantially
      the same in scope as ECLA classification G06F17/30T2P9.

      SEE OR SEARCH THIS CLASS, SUBCLASS:

      E17.063, for formulation of new queries.

E17.082 **Presentation or visualization of query results (EPO):**
      This subclass is indented under subclass E17.061. This subclass is substantially
      the same in scope as ECLA classification G06F17/30T2V.

      SEE OR SEARCH THIS CLASS, SUBCLASS:

      E17.093, browsing or visualization of document space.

E17.083 **Indexing (EPO):**
      This subclass is indented under subclass E17.058. This subclass is substantially
      the same in scope as ECLA classification G06F17/30T1.

E17.084 **Selection or weighting of terms for indexing (EPO):**
      This subclass is indented under subclass E17.083. This subclass is substantially
      the same in scope as ECLA classification G06F17/30T1E.

      SEE OR SEARCH THIS CLASS, SUBCLASS:

      E17.094, for summarization.

E17.085 **Physical indexing structures (EPO):**
      This subclass is indented under subclass E17.083. This subclass is substantially
      the same in scope as ECLA classification G06F17/30T1P.

E17.086 **Inverted lists (EPO):**
      This subclass is indented under subclass E17.085. This subclass is substantially
      the same in scope as ECLA classification G06F17/30T1P1.

E17.087 **Trees (EPO):**
      This subclass is indented under subclass E17.085. This subclass is substantially
      the same in scope as ECLA classification G06F17/30T1P3.

E17.088 **Index managing details (EPO):**
      This subclass is indented under subclass E17.085. This subclass is substantially
      the same in scope as ECLA classification G06F17/30T1P9.

E17.089 **Clustering or classification (EPO):**
      This subclass is indented under subclass E17.058. This subclass is substantially
      the same in scope as ECLA classification G06F17/30T4.

      SEE OR SEARCH THIS CLASS, SUBCLASS:

      E17.095, for manual classification.

E17.09   **Into predefined classes (EPO):**
This subclass is indented under subclass E17.089. This subclass is substantially
the same in scope as ECLA classification G06F17/30T4C.

E17.091   **Including class or cluster creation or modification (EPO):**
This subclass is indented under subclass E17.089. This subclass is substantially
the same in scope as ECLA classification G06F17/30T4M.

E17.092   **Including cluster or class visualization or browsing (EPO):**
This subclass is indented under subclass E17.089. This subclass is substantially
the same in scope as ECLA classification G06F17/30T4V.

E17.093   **Browsing or visualization (EPO):**
This subclass is indented under subclass E17.058. This subclass is substantially
the same in scope as ECLA classification G06F17/30T5.

E17.094   **Summarization for human users (EPO):**
This subclass is indented under subclass E17.093. This subclass is substantially
the same in scope as ECLA classification G06F17/30T5S.

E17.095   **Based on associated metadata or manual classification, e.g., bibliographic
data, etc. (EPO):**
This subclass is indented under subclass E17.058. This subclass is substantially
the same in scope as ECLA classification G06F17/30T6.

E17.096   **Using identifiers, e.g., barcodes, radio frequency identifications, etc. (EPO):**
This subclass is indented under subclass E17.095. This subclass is substantially
the same in scope as ECLA classification G06F17/30T6A.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E17.113, for URLs.

E17.097   **Using citations (EPO):**
This subclass is indented under subclass E17.095. This subclass is substantially
the same in scope as ECLA classification G06F17/30T6C.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E17.013, for hypermedia.

E17.098   **Creation of semantic tools (EPO):**
This subclass is indented under subclass E17.058. This subclass is substantially
the same in scope as ECLA classification G06F17/30T8.

E17.099   **Ontology (EPO):**
This subclass is indented under subclass E17.098. This subclass is substantially
the same in scope as ECLA classification G06F17/30T8G.

E17.1   **Thesaurus (EPO):**
                   This subclass is indented under subclass E17.098. This subclass is substantially
                   the same in scope as ECLA classification G06F17/30T8T.

E17.101   **Of audio data (EPO):**
                   This subclass is indented under subclass E17.001. This subclass is substantially
                   the same in scope as ECLA classification G06F17/30U.

E17.102   **Based on associated metadata, e.g., bibliographic data, images associated
                   with audio data, etc. (EPO):**
                   This subclass is indented under subclass E17.101. This subclass is substantially
                   the same in scope as ECLA classification G06F17/30U6.

E17.103   **Wherein the metadata is a transcript of the audio data (EPO):**
                   This subclass is indented under subclass E17.102. This subclass is substantially
                   the same in scope as ECLA classification G06F17/30U6T.

E17.104   **Processing sequentially ordered data, e.g., alpha-numerically ordered, etc.
                   (EPO):**
                   This subclass is indented under subclass E17.001. This subclass is substantially
                   the same in scope as ECLA classification G06F17/30V.

E17.105   **Binary access (EPO):**
                   This subclass is indented under subclass E17.104. This subclass is substantially
                   the same in scope as ECLA classification G06F17/30V2.

E17.106   **Sequential access (EPO):**
                   This subclass is indented under subclass E17.104. This subclass is substantially
                   the same in scope as ECLA classification G06F17/30V3.

E17.107   **Retrieval from the Internet, e.g., browsers, etc. (EPO):**
                   This subclass is indented under subclass E17.001. This subclass is substantially
                   the same in scope as ECLA classification G06F17/30W.

E17.108   **By querying, e.g., search engines or meta-search engines, crawling
                   techniques, push systems, etc. (EPO):**
                   This subclass is indented under subclass E17.107. This subclass is substantially
                   the same in scope as ECLA classification G06F17/30W1.

E17.109   **With filtering and personalization (EPO):**
                   This subclass is indented under subclass E17.108. This subclass is substantially
                   the same in scope as ECLA classification G06F17/30W1F.

E17.11   **Spatially dependent indexing and retrieval, e.g., location dependent results
                   to queries, etc. (EPO):**
                   This subclass is indented under subclass E17.108. This subclass is substantially
                   the same in scope as ECLA classification G06F17/30W1S.

E17.111   **By navigation, e.g., using categorized browsing, portals, synchronized browsing, visual networks of documents, virtual worlds or tours, etc. (EPO):**
This subclass is indented under subclass E17.107. This subclass is substantially the same in scope as ECLA classification G06F17/30W3.

E17.112   **By using information identifiers, e.g., encoding URL in specific indicia, browsing history, etc. (EPO):**
This subclass is indented under subclass E17.107. This subclass is substantially the same in scope as ECLA classification G06F17/30W5.

E17.113   **By using bar codes (EPO):**
This subclass is indented under subclass E17.112. This subclass is substantially the same in scope as ECLA classification G06F17/30W5B.

E17.114   **Bookmark management (EPO):**
This subclass is indented under subclass E17.112. This subclass is substantially the same in scope as ECLA classification G06F17/30W5K.

E17.115   **URL specific, e.g., using aliases, detecting broken or misspelled links, etc. (EPO):**
This subclass is indented under subclass E17.112. This subclass is substantially the same in scope as ECLA classification G06F17/30W5L.

E17.116   **Web site content organization and management, e.g., publishing, automatic linking or maintaining pages, etc. (EPO):**
This subclass is indented under subclass E17.107. This subclass is substantially the same in scope as ECLA classification G06F17/30W7.

E17.117   **Access to data in other repository systems, e.g., legacy data or dynamic Web page generation, etc. (EPO):**
This subclass is indented under subclass E17.116. This subclass is substantially the same in scope as ECLA classification G06F17/30W7L.

E17.118   **Document structures and storage, e.g., HTML extensions, etc. (EPO):**
This subclass is indented under subclass E17.116. This subclass is substantially the same in scope as ECLA classification G06F17/30W7S.

E17.119   **Browsing optimization (EPO):**
This subclass is indented under subclass E17.107. This subclass is substantially the same in scope as ECLA classification G06F17/30W9.

E17.12   **Of access to content, e.g., by caching, etc. (EPO):**
This subclass is indented under subclass E17.119. This subclass is substantially the same in scope as ECLA classification G06F17/30W9C.

E17.121   **Optimizing the visualization of content, e.g., distillation of HTML documents, etc. (EPO):**
This subclass is indented under subclass E17.119. This subclass is substantially the same in scope as ECLA classification G06F17/30W9V.

E17.122   **Of semistructured data, the underlying structure being taken into account, e.g., mark-up language structure data, etc. (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially the same in scope as ECLA classification G06F17/30X.

E17.123   **Indexing, e.g., of XML tags, etc. (EPO):**
This subclass is indented under subclass E17.122. This subclass is substantially the same in scope as ECLA classification G06F17/30X1.

E17.124   **Mapping or conversion (EPO):**
This subclass is indented under subclass E17.122. This subclass is substantially the same in scope as ECLA classification G06F17/30X3.

E17.125   **Mapping to a database (EPO):**
This subclass is indented under subclass E17.124. This subclass is substantially the same in scope as ECLA classification G06F17/30X3D.

E17.126   **Mark-up to mark-up conversion (EPO):**
This subclass is indented under subclass E17.124. This subclass is substantially the same in scope as ECLA classification G06F17/30X3M.

    SEE OR SEARCH THIS CLASS, SUBCLASS:

    E17.121, for conversion for visualization in web browsing.

E17.127   **XML native databases, structures and querying (EPO):**
This subclass is indented under subclass E17.122. This subclass is substantially the same in scope as ECLA classification G06F17/30X7.

E17.128   **Query formulation (EPO):**
This subclass is indented under subclass E17.127. This subclass is substantially the same in scope as ECLA classification G06F17/30X7F.

E17.129   **Query processing (EPO):**
This subclass is indented under subclass E17.127. This subclass is substantially the same in scope as ECLA classification G06F17/30X7P.

E17.13   **Query translation (EPO):**
This subclass is indented under subclass E17.129. This subclass is substantially the same in scope as ECLA classification G06F17/30X7P2.

E17.131   **Query optimization (EPO):**
This subclass is indented under subclass E17.129. This subclass is substantially the same in scope as ECLA classification G06F17/30X7P3.

E17.132   **Query execution (EPO):**
This subclass is indented under subclass E17.129. This subclass is substantially the same in scope as ECLA classification G06F17/30X7P4.

E17.133   **Results presentation (EPO):**
This subclass is indented under subclass E17.127. This subclass is substantially
the same in scope as ECLA classification G06F17/30X7V.

E17.134   **Details of database functions independent of the retrieved data type (EPO):**
This subclass is indented under subclass E17.001. This subclass is substantially
the same in scope as ECLA classification G06F17/30Z.

E17.135   **Querying (EPO):**
This subclass is indented under subclass E17.134. This subclass is substantially
the same in scope as ECLA classification G06F17/30Z2.

E17.136   **Query formulation (EPO):**
This subclass is indented under subclass E17.135. This subclass is substantially
the same in scope as ECLA classification G06F17/30Z2F.

E17.137   **Using system suggestions (EPO):**
This subclass is indented under subclass E17.136. This subclass is substantially
the same in scope as ECLA classification G06F17/30Z2F1.

E17.138   **Using search space presentation or visualization, e.g. category or range
presentation and selection, etc. (EPO):**
This subclass is indented under subclass E17.137. This subclass is substantially
the same in scope as ECLA classification G06F17/30Z2F1V.

E17.139   **Natural language query formulation or dialogue systems (EPO):**
This subclass is indented under subclass E17.136. This subclass is substantially
the same in scope as ECLA classification G06F17/30Z2F4.

E17.14   **Query processing (EPO):**
This subclass is indented under subclass E17.135. This subclass is substantially
the same in scope as ECLA classification G06F17/30Z2P.

E17.141   **Presentation or visualization of query results (EPO):**
This subclass is indented under subclass E17.135. This subclass is substantially
the same in scope as ECLA classification G06F17/30Z2V.

E17.142   **Browsing or visualization (EPO):**
This subclass is indented under subclass E17.134. This subclass is substantially
the same in scope as ECLA classification G06F17/30Z5.

E17.143   **Retrieval based on associated metadata (EPO):**
This subclass is indented under subclass E17.134. This subclass is substantially
the same in scope as ECLA classification G06F17/30Z6.