

ANNEX II

Request for Proposals (RFP) N° PCD/09/055

Database Specification for Bangladesh Data Capture Project



INTELLECTUAL PROPERTY OFFICES MODERNIZATION DIVISION

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1 Introduction

This document describes a possible structure for the database containing the trademarks and patents data to be generated as part of the data capture project in Bangladesh.

The discussed structure is not meant to be used for the final system the IP office will use to manage the trademarks and patents information, but just as an intermediary database to be populated by the data capture project. From this database, a subsequent import exercise will be needed to transfer the information to the final system to be used by the IP office in order to manage its daily operations.

Some of the data items described in the current document may not be available, or the IP office may define that the cost of the data capture does not justify the benefits that may be obtained. Therefore, the current document can be used as a starting point for such discussions. From the perspective of a data capture project, there are three separate categories of data items to be captured:

- Current textual bibliographic data, which contains the most up-to-date textual bibliographic information such as the current owner, the current protected products, etc. This data will be manually typed from the source documents.
- Images data, which contain images associated to the files, like the trademark logos, the patent drawings or the designs reproductions. This data needs to be scanned from the source documents, and therefore the cost of acquisition will be much higher than the case of textual bibliographic data.
- Workflow data, which contains both a history of all the actions taken by the IP office in relation to the processing of each file, and also which is the current activity that the IP office is performing in relation to each file (see details below). This is textual data which must be manually typed, but normally it is not so readily available as the bibliographic data and therefore the cost of acquisition will also be higher.

As part of the definition of the scope of the data capture project, it must be defined which of the above data items will be captured.

2 Bibliographic data

The first category of information items to be captured is the current textual bibliographic data. This section describes the structure of the tables used to store such data for Trademarks, Patents and Designs, and also highlights some of the issues that must be taken into account for developing the data capture strategy.

By “current data” we mean the most up-to-date version of the corresponding data item. This has relevant implications for the data capture process, since this up-to-date information may not be readily available.

For example, let’s suppose that a trademark 12345 was originally filed by company ABC. This data is easily located since normally the file will start with the application form which contains this data. But maybe this company has subsequently assigned the trademark to another company XYZ, and the information of such assignment may be contained in a request located 50 pages after the application form in the file. Another possible situation could be a subsequent limitation of the protected goods and services of a trademark, or an update of the patent claims as a result of an objection raised by the examiner, etc.

Therefore, a data capture strategy must be developed to take all these issues into account and also evaluate the costs and benefits of each alternative.

As possible alternatives to be analyzed, it must be considered that some IP offices manually keep a “Register” in cardboard form with the bibliographic data at the time of registration plus all subsequent transactions affecting the file. Therefore the Register is a valuable source of information which must be analyzed as a supplement of the paper files. But even in this case, the Register is normally created only at registration time, and therefore all pending files will not have a Register and locating the current bibliographic data items may require browsing through all the pages in the physical file. Maybe the cost of this operation is too high and the final strategy may consist in capturing the bibliographic data for pending files from the original application form, even knowing that the information may have been updated subsequently and therefore the database will not be up to date.

The above notes must not be taken as a suggestion that certain data capture strategy should be followed by the IP office, but just as alternatives to be evaluated to develop such strategy. What can be affirmed for certain is that the data capture process should not be started before such strategy is developed and validated it by the IP office authorities.

2.1 Trademark bibliographic data

The following tables contain the bibliographic data for trademarks.

For the numbering of trademark files (the same applies to patents and designs), a flexible approach is suggested using as the file key a combination of four components described below (the actual need to use these components would depend on the numbering strategies used by the IP office):

- FILE_NBR, which contains the basic file number.
- FILE_SERIES, which contains a series which could be either annual or fixed, e.g. it could be an annual series, or a fixed series that never changes or that changes to indicate major changes in the underlying legislation, etc.
- The above components may not enough to identify a specific file within the IP office, since many different “sequences” could exist which use the same combination of file series and number. Therefore a “sequence” concept could be added, as a combination of:
 - FILE_TYPE is the component of the sequence which depends on the application type, i.e. on the “legal” aspects of the document. Normally, separate sequences are

used for marks, geographical indications, patents, utility models, industrial designs, etc. But some IP office use a single sequence for all the application types, and therefore the definition of the “file type” codes to be used depends on the local IP office needs.

- FILE_SEQ is the component of the sequence which depends on other factors apart from the application type, e.g. on the reception place or reception mechanism. Normally a single code is used for this concept but under certain circumstance the code could be useful, depending again on the local IP office needs. Examples of situations where the FILE_SEQ code could be useful are:
 - Some large offices use a separate sequence for each regional office where reception takes place, so the FILE_SEQ could reflect this concept.
 - Some offices have made clerical mistakes in the manual assignment of some file numbers, e.g. assigning the same number to two or more files. In these cases, normally a “letter” is used to distinguish these files, e.g. 1234/A, 1234/B, etc, and in these cases the FILE_SEQ could be used to reflect this concept.

2.1.1 MARK (basic trademark data)

This table contains basic trademark data, and the columns are as follows.

File identification:

- FILE_SEQ (string): file sequence, as described in the beginning of the section.
- FILE_TYPE (string): file type, as described in the beginning of the section.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Filing data:

- APPLICATION_TYPE (string): application type, using specific codes which describe each of the Industrial Property titles issued by the IP office, e.g. trademarks, certification marks, geographical indications, patents, utility models, industrial designs, etc.
- APPLICATION_SUBTYPE (string): application subtype, using specific codes which refine the APPLICATION_TYPE in order to define variations of the main type. For example, in the case of the application type “patents”, separate subtypes may be needed for “national patents”, “PCT patents”, “regional patents”, etc.
- LAW_CODE (number): law code, using specific codes identifying the law which regulates the processing of the file.
- FILING_DATE (date and time): filing date.
- RECEPTION_DATE (date and time): reception date.

Publication data:

- PUBLICATION_DATE (date): publication date.
- PUBLICATION_NOTES (string): publication notes.

Registration data:

- IND_REGISTERED (numeric): indicator (0/1) that the file has been registered.
- REGISTRATION_TYPE (string): registration type code, using specific codes which identify the type of registration.

- REGISTRATION_SERIES (number): registration series.
- REGISTRATION_NBR (number): registration number.
- REGISTRATION_DUP (string): registration duplicate.
- REGISTRATION_DATE (date): registration date.
- ENTITLEMENT_DATE (date): entitlement date.
- EXPIRATION_DATE (date): expiration date.

Exhibition data:

- EXHIBITION_DATE (date): date on which it was shown in an officially recognized exhibition (INID 230).
- EXHIBITION_NOTES (string): notes about such exhibition.

Sign data:

- SIGN_TYPE (string): type of sign (N = name only, L = logo only, B = both name and logo) (INID 550)
- MARK_NAME (string): mark name.
- MARK_TRANSLATION (string): mark translation.
- SERIES_DESCRIPTION (string): mark series description.
- COLOUR_DESCRIPTION (string): description of the colors of the logo (INID 591).

Limitation data:

- DISCLAIMER (string): disclaimer.
- BY_CONSENT (string): by consent claim.
- REGULATIONS (long string): usage regulations.

2.1.2 MARK_OWNERS (list of owners for each mark)

This table contains the list of owners for each mark.

File identification (must reference the corresponding row in MARK):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Owner data:

- IND_SERVICE (numeric): indicator (0/1) that this is the “main owner” supplying the service address for the file.
- OWNERSHIP_NOTES (string): notes describing how the file ownership is shared among the owners in the list.

Person data:

- PERSON_NAME (string): person name.

- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- IND_COMPANY (number): indicator (0/1) that the person is a company.
- LEGAL_NATURE (string): legal nature of the company.
- LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with LEGAL_ID_TYPE.
- INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with INDIVIDUAL_ID_TYPE.
- RESIDENCE_COUNTRY_CODE (string): residence country code, using the WIPO country codes.
- STATE_NAME (string): state name.
- CITY_NAME (string): city name.
- ADDRESS_ZONE (string): zone component of the address.
- ADDRESS_STREET (string): street component of the address.
- ZIP_CODE (string): postal code.
- EMAIL (string): e-mail.
- TELEPHONE (string): telephone.
- PERSON_GROUP_CODE (string): person group code.

2.1.3 MARK_REPRS (list of representatives for each mark)

This table contains the list of representatives for each mark.

File identification (must reference the corresponding row in MARK):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Representative data:

- IND_SERVICE (numeric): indicator (0/1) that this representative is the one supplying the service address for the file.
- REPRESENTATIVE_TYPE (string): representative type, using specific codes identifying the type of relationship between the IP office and the representative, e.g. agent, representative, legal advisor, etc.

Person data:

- PERSON_NAME (string): person name.

- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with LEGAL_ID_TYPE.
- INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with INDIVIDUAL_ID_TYPE.
- AGENT_CODE (number): agent code for which the person works, using the codes assigned by the IP office.
- RESIDENCE_COUNTRY_CODE (string): residence country code, using the WIPO country codes.
- STATE_NAME (string): state name.
- CITY_NAME (string): city name.
- ADDRESS_ZONE (string): zone component of the address.
- ADDRESS_STREET (string): street component of the address.
- ZIP_CODE (string): postal code.
- EMAIL (string): e-mail.
- TELEPHONE (string): telephone.
- PERSON_GROUP_CODE (string): person group code.

2.1.4 MARK_PRIORITIES (list of priorities for each mark)

This table contains the list of Paris priorities for each mark file.

File identification (must reference the corresponding row in MARK):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Priority data:

- COUNTRY_CODE (string): priority country code, using the WIPO country codes.
- APPLICATION_ID (string): application identification.
- PRIORITY_DATE (date): priority date.
- NOTES (string): priority notes.
- IND_ACCEPTED (number): indicator (0/1) that the priority claim has been accepted by the IP office.

2.1.5 MARK_RELS (list of relationships for each mark)

This table contains the list of relationships for each mark.

File identification (must reference the corresponding row in MARK):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Relationship data:

- RELATIONSHIP_TYPE (string): relationship type, using specific codes identifying each type of relationship that a file may have with another file. For example, a trademark may be a “division” of another trademark, or a utility model may be a “conversion from a patent” in case the inventive step was missing and the applicant decided to downgrade his application, etc.
- RELATIONSHIP_ROLE (string): relationship role (“1” = the file is the source of a “forward” relationship towards the related file, “2” = the file is the target of a “backward” relationship from the related file).
- RELATED_FILE_SEQ (string): file sequence of the related file.
- RELATED_FILE_TYPE (string): file type of the related file.
- RELATED_FILE_SERIES (number): file series of the related file.
- RELATED_FILE_NBR (number): file number of the related file.

2.1.6 MARK_VIENNA_CLASSES (list of Vienna classes for each mark)

This table contains the list of the Vienna classes describing the figurative elements of each mark.

File identification (must reference the corresponding row in MARK):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Vienna data:

- VIENNA_EDITION (number): Vienna edition, using the codes defined by WIPO.
- VIENNA_CATEGORY (number): Vienna category, using the codes defined by WIPO.
- VIENNA_DIVISION (number): Vienna division, using the codes defined by WIPO.
- VIENNA_SECTION (number): Vienna section, using the codes defined by WIPO.

2.1.7 MARK_NICE_CLASSES (list of Nice classes for each mark).

This table contains the list of the Nice classes for each mark.

File identification (must reference the corresponding row in MARK):

- FILE_SEQ (string): file sequence.

- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Nice data:

- NICE_CLASS_EDITION (number): Nice edition, using the codes defined by WIPO.
- NICE_CLASS_NBR (number): Nice class number, using the codes defined by WIPO.
- NICE_CLASS_DESCRIPTION (long string): description of goods and services.
-

2.1.8 MARK_NATL_CLASSES (list of national classes for each mark).

This table contains the list of the national classes of goods and services for each mark.

File identification (must reference the corresponding row in MARK):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Nice data:

- NATIONAL_CLASS_NBR (number): national class number, using the codes assigned by the IP office.
- NATIONAL_CLASS_DESCRIPTION (long string): description of goods and services.

2.2 Patent bibliographic data

The following tables contain the bibliographic data for patents.

2.2.1 PATENT (basic patent data).

This table contains basic patent data, and the columns are as follows.

File identification:

- FILE_SEQ (string): file sequence, as described in the beginning of the section.
- FILE_TYPE (string): file type, as described in the beginning of the section.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Filing data:

- APPLICATION_TYPE (string): application type, using specific codes which describe each of the Industrial Property titles issued by the IP office, e.g. trademarks, certification marks, geographical indications, patents, utility models, industrial designs, etc.
- APPLICATION_SUBTYPE (string): application subtype, using specific codes which refine the APPLICATION_TYPE in order to define variations of the main type. For example, in the case

of the application type “patents”, separate subtypes may be needed for “national patents”, “PCT patents”, “regional patents”, etc.

- LAW_CODE (number): law code, using specific codes identifying the law which regulates the processing of the file.
- FILING_DATE (date and time): filing date.
- RECEPTION_DATE (date and time): reception date.

Publication data:

- PUBLICATION_DATE (date): publication date.
- PUBLICATION_NOTES (string): publication notes.

Registration data:

- IND_REGISTERED (numeric): indicator (0/1) that the file has been registered.
- REGISTRATION_TYPE (string): registration type code, using specific codes which identify the type of registration.
- REGISTRATION_SERIES (number): registration series.
- REGISTRATION_NBR (number): registration number.
- REGISTRATION_DUP (string): registration duplicate.
- REGISTRATION_DATE (date): registration date.
- ENTITLEMENT_DATE (date): entitlement date.
- EXPIRATION_DATE (date): expiration date.

Exhibition data:

- EXHIBITION_DATE (date): date on which it was shown in an officially recognized exhibition (INID 230).
- EXHIBITION_NOTES (string): notes about such exhibition.

PCT data:

- PCT_PHASE (number): PCT phase (1=phase 1, 2=phase 2).
- PCT_APPLICATION_ID (string): PCT application id.
- PCT_APPLICATION_DATE (date): PCT application date.
- PCT_PUBLICATION_COUNTRY_CODE (string): PCT publication country code.
- PCT_PUBLICATION_DATE (date): PCT publication date.
- PCT_PUBLICATION_TYPE (date): PCT publication type.
- PCT_PUBLICATION_ID (string): PCT publication id.

Technical data:

- TITLE (string): title.
- ABSTRACT (long string): abstract.
- ENGLISH_TITLE (string): title translated into English.
- ENGLISH_ABSTRACT (long string): abstract translated into English.
- LAST_CLAIMS_PAGE_REF (string): page reference to the last filed claims in the document.

- LAST_DESCRIPTION_PAGE_REF (string): page reference to the last filed description in the document.

Examination data:

- USED_IPC_DESCRIPTION (string): description of IPC classes used for examination.
- USED_KEYWORD_DESCRIPTION (string): description of keywords used for examination.
- IND_EXAM_INDUSTRIAL (number): indicator (0/1) that the industrial applicability requirement is fulfilled.
- IND_EXAM_INVENTIVE (number): indicator (0/1) that the inventive step requirement is fulfilled.
- IND_EXAM_NOVELTY (number): indicator (0/1) that the novelty requirement is fulfilled.
- EXAM_RESULT (string): description of examination result.

2.2.2 PATENT_OWNERS (list of owners for each patent).

This table contains the list of owners for each patent.

File identification (must reference the corresponding row in PATENT):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Owner data:

- IND_SERVICE (numeric): indicator (0/1) that this is the “main owner” supplying the service address for the file.
- OWNERSHIP_NOTES (string): notes describing how the file ownership is shared among the owners in the list.

Person data:

- PERSON_NAME (string): person name.
- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- IND_COMPANY (number): indicator (0/1) that the person is a company.
- LEGAL_NATURE (string): legal nature of the company.
- LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with LEGAL_ID_TYPE.
- INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with INDIVIDUAL_ID_TYPE.

- RESIDENCE_COUNTRY_CODE (string): residence country code, using the WIPO country codes.
- STATE_NAME (string): state name.
- CITY_NAME (string): city name.
- ADDRESS_ZONE (string): zone component of the address.
- ADDRESS_STREET (string): street component of the address.
- ZIP_CODE (string): postal code.
- EMAIL (string): e-mail.
- TELEPHONE (string): telephone.
- PERSON_GROUP_CODE (string): person group code.

2.2.3 PATENT_REPRS (list of representatives for each patent).

This table contains the list of representatives for each patent.

File identification (must reference the corresponding row in PATENT):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Representative data:

- IND_SERVICE (numeric): indicator (0/1) that this representative is the one supplying the service address for the file.
- REPRESENTATIVE_TYPE (string): representative type, using specific codes identifying the type of relationship between the IP office and the representative, e.g. agent, representative, legal advisor, etc.

Person data:

- PERSON_NAME (string): person name.
- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with LEGAL_ID_TYPE.
- INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with INDIVIDUAL_ID_TYPE.
- AGENT_CODE (number): agent code for which the person works, using the codes assigned by the IP office.
- RESIDENCE_COUNTRY_CODE (string): residence country code, using the WIPO country codes.

- STATE_NAME (string): state name.
- CITY_NAME (string): city name.
- ADDRESS_ZONE (string): zone component of the address.
- ADDRESS_STREET (string): street component of the address.
- ZIP_CODE (string): postal code.
- EMAIL (string): e-mail.
- TELEPHONE (string): telephone.
- PERSON_GROUP_CODE (string): person group code.

2.2.4 PATENT_PRIORITIES (list of priorities for each patent).

This table contains the list of Paris priorities for each patent.

File identification (must reference the corresponding row in PATENT):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Priority data:

- COUNTRY_CODE (string): priority country code, using the WIPO country codes.
- APPLICATION_ID (string): application identification.
- PRIORITY_DATE (date): priority date.
- NOTES (string): priority notes.
- IND_ACCEPTED (number): indicator (0/1) that the priority claim has been accepted by the IP office.

2.2.5 PATENT_RELS (list of relationships for each patent).

This table contains the list of relationships for each patent.

File identification (must reference the corresponding row in PATENT):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Relationship data:

- RELATIONSHIP_TYPE (string): relationship type, using specific codes identifying each type of relationship that a file may have with another file. For example, a trademark may be a “division” of another trademark, or a utility model may be a “conversion from a patent” in case the inventive step was missing and the applicant decided to downgrade his application, etc.
- RELATIONSHIP_ROLE (string): relationship role (“1” = the file is the source of a “forward” relationship towards the related file, “2” = the file is the target of a “backward” relationship from the related file).

- RELATED_FILE_SEQ (string): file sequence of the related file.
- RELATED_FILE_TYPE (string): file type of the related file.
- RELATED_FILE_SERIES (number): file series of the related file.
- RELATED_FILE_NBR (number): file number of the related file.

2.2.6 PATENT_CLAIMS (list of claims for each patent).

This table contains the list of claims for each patent.

File identification (must reference the corresponding row in PATENT):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Claim data:

- CLAIM_NBR (number): claim number.
- CLAIM_DESCRIPTION (long string): claim description.
- CLAIM_ENGLISH_DESCRIPTION (long string): claim description translated into English.

2.2.7 PATENT_IPC_CLASSES (list of IPC classes for each patent).

This table contains the list of IPC classes for each patent.

File identification (must reference the corresponding row in PATENT):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

IPC data:

- IPC_EDITION (string): IPC edition, using the WIPO codes.
- IPC_SECTION (string): IPC section, using the WIPO codes.
- IPC_CLASS (string): IPC class, using the WIPO codes.
- IPC_SUBCLASS (string): IPC subclass, using the WIPO codes.
- IPC_GROUP (string): IPC group, using the WIPO codes.
- IPC_SUBGROUP (string): IPC subgroup, using the WIPO codes.
- IPC_QUALIFICATION (string): IPC qualification code, as per standard ST.8 ("A" = first classification symbol representing invention information, "B" = other classification symbols representing invention information, "-" = classification symbols representing additional information, etc).

2.2.8 PATENT_EXAM_DOCS (list of exam documents for each patent).

This table contains the list of examination documents used for each patent.

File identification (must reference the corresponding row in PATENT):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Examination document data:

- REF_NBR (number): reference number.
- REF_CATEG_CODE (string): reference category, as per WIPO standard ST.14.
- REF_AFFECTS_CLAIMS (string): description of the claims affected by the referenced document.
- REF_DESCRIPTION (string): description of the reference document.

2.2.9 PATENT_INVENTORS (list of inventors for each patent).

This table contains the list of inventors for each patent.

File identification (must reference the corresponding row in PATENT):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Author data:

- IND_OWNER_SAME_AUTHOR (numeric): indicator (0/1) that the owner is also the inventor.
- AUTHOR_SEQ (number): inventor sequence.

Person data:

- PERSON_NAME (string): person name.
- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with LEGAL_ID_TYPE.
- INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with INDIVIDUAL_ID_TYPE.

- RESIDENCE_COUNTRY_CODE (string): residence country code, using the WIPO country codes.
- STATE_NAME (string): state name.
- CITY_NAME (string): city name.
- ADDRESS_ZONE (string): zone component of the address.
- ADDRESS_STREET (string): street component of the address.
- ZIP_CODE (string): postal code.
- EMAIL (string): e-mail.
- TELEPHONE (string): telephone.
- PERSON_GROUP_CODE (string): person group code.

2.2.10 PATENT_ANNUITIES (list of annuities for each patent).

This table contains the list of annuities for each patent.

File identification (must reference the corresponding row in PATENT):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Annuity data:

- ANNUITY_NBR (number): annuity number.
- EXPIRATION_DATE (date): annuity expiration date.
- GRACE_DATE (date): annuity grace date.
- IND_IGNORE (number): indicator (0/1) that the annuity should be ignored for the purposes of payment control.
- IND_PAID (number): indicator (0/1) that the annuity has been already paid.
- COMPLETE_PAYMENT_DATE (date): date on which complete payment took place.

2.3 Design bibliographic data

The following tables contain the bibliographic for designs.

2.3.1 DESIGN (basic design data).

This table contains basic design data, and the columns are as follows.

File identification:

- FILE_SEQ (string): file sequence, as described in the beginning of the section.
- FILE_TYPE (string): file type, as described in the beginning of the section.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Filing data:

- APPLICATION_TYPE (string): application type, using specific codes which describe each of the Industrial Property titles issued by the IP office, e.g. trademarks, certification marks, geographical indications, patents, utility models, industrial designs, etc.
- APPLICATION_SUBTYPE (string): application subtype, using specific codes which refine the APPLICATION_TYPE in order to define variations of the main type. For example, in the case of the application type "patents", separate subtypes may be needed for "national patents", "PCT patents", "regional patents", etc.
- LAW_CODE (number): law code, using specific codes identifying the law which regulates the processing of the file.
- FILING_DATE (date and time): filing date.
- RECEPTION_DATE (date and time): reception date.

Publication data:

- PUBLICATION_DATE (date): publication date.
- PUBLICATION_NOTES (string): publication notes.

Registration data:

- IND_REGISTERED (numeric): indicator (0/1) that the file has been registered.
- REGISTRATION_TYPE (string): registration type code, using specific codes which identify the type of registration.
- REGISTRATION_SERIES (number): registration series.
- REGISTRATION_NBR (number): registration number.
- REGISTRATION_DUP (string): registration duplicate.
- REGISTRATION_DATE (date): registration date.
- ENTITLEMENT_DATE (date): entitlement date.
- EXPIRATION_DATE (date): expiration date.

Exhibition data:

- EXHIBITION_DATE (date): date on which it was shown in an officially recognized exhibition (INID 230).
- EXHIBITION_NOTES (string): notes about such exhibition.

Technical data:

- TITLE (string): title.
- ENGLISH_TITLE (string): title translated into English.

2.3.2 DESIGN_OWNERS (list of owners for each design).

This table contains the list of owners for each design.

File identification (must reference the corresponding row in DESIGN):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.

- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Owner data:

- IND_SERVICE (numeric): indicator (0/1) that this is the “main owner” supplying the service address for the file.
- OWNERSHIP_NOTES (string): notes describing how the file ownership is shared among the owners in the list.

Person data:

- PERSON_NAME (string): person name.
- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- IND_COMPANY (number): indicator (0/1) that the person is a company.
- LEGAL_NATURE (string): legal nature of the company.
- LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with LEGAL_ID_TYPE.
- INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with INDIVIDUAL_ID_TYPE.
- RESIDENCE_COUNTRY_CODE (string): residence country code, using the WIPO country codes.
- STATE_NAME (string): state name.
- CITY_NAME (string): city name.
- ADDRESS_ZONE (string): zone component of the address.
- ADDRESS_STREET (string): street component of the address.
- ZIP_CODE (string): postal code.
- EMAIL (string): e-mail.
- TELEPHONE (string): telephone.
- PERSON_GROUP_CODE (string): person group code.

2.3.3 DESIGN_REPRS (list of representatives for each design).

This table contains the list of representatives for each design.

File identification (must reference the corresponding row in DESIGN):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Representative data:

- IND_SERVICE (numeric): indicator (0/1) that this representative is the one supplying the service address for the file.
- REPRESENTATIVE_TYPE (string): representative type, using specific codes identifying the type of relationship between the IP office and the representative, e.g. agent, representative, legal advisor, etc.

Person data:

- PERSON_NAME (string): person name.
- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with LEGAL_ID_TYPE.
- INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with INDIVIDUAL_ID_TYPE.
- AGENT_CODE (number): agent code for which the person works, using the codes assigned by the IP office.
- RESIDENCE_COUNTRY_CODE (string): residence country code, using the WIPO country codes.
- STATE_NAME (string): state name.
- CITY_NAME (string): city name.
- ADDRESS_ZONE (string): zone component of the address.
- ADDRESS_STREET (string): street component of the address.
- ZIP_CODE (string): postal code.
- EMAIL (string): e-mail.
- TELEPHONE (string): telephone.
- PERSON_GROUP_CODE (string): person group code.

2.3.4 DESIGN_PRIORITIES (list of priorities for each design).

This table contains the list of Paris priorities for each design.

File identification (must reference the corresponding row in DESIGN):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Priority data:

- COUNTRY_CODE (string): priority country code, using the WIPO country codes.
- APPLICATION_ID (string): application identification.
- PRIORITY_DATE (date): priority date.
- NOTES (string): priority notes.
- IND_ACCEPTED (number): indicator (0/1) that the priority claim has been accepted by the IP office.

2.3.5 DESIGN_RELS (list of relationships for each design).

This table contains the list of relationships for each design.

File identification (must reference the corresponding row in DESIGN):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Relationship data:

- RELATIONSHIP_TYPE (string): relationship type, using specific codes identifying each type of relationship that a file may have with another file. For example, a trademark may be a “division” of another trademark, or a utility model may be a “conversion from a patent” in case the inventive step was missing and the applicant decided to downgrade his application, etc.
- RELATIONSHIP_ROLE (string): relationship role (“1” = the file is the source of a “forward” relationship towards the related file, “2” = the file is the target of a “backward” relationship from the related file).
- RELATED_FILE_SEQ (string): file sequence of the related file.
- RELATED_FILE_TYPE (string): file type of the related file.
- RELATED_FILE_SERIES (number): file series of the related file.
- RELATED_FILE_NBR (number): file number of the related file.

2.3.6 DESIGN_LOCARNO_CLASSES (list of Locarno classes for each design).

This table contains the list of Locarno classes for each design.

File identification (must reference the corresponding row in PATENT):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Locarno data:

- LOCARNO_CLASS_NBR (number): Locarno class number, using the WIPO codes.
- LOCARNO_SUBCLASS_NBR (number): Locarno subclass number, using the WIPO codes.

2.3.7 DESIGN_CREATORS (list of creators for each design).

This table contains the list of creators for each design.

File identification (must reference the corresponding row in DESIGN):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Author data:

- IND_OWNER_SAME_AUTHOR (numeric): indicator (0/1) that the owner is also the creator.
- AUTHOR_SEQ (number): creator sequence.

Person data:

- PERSON_NAME (string): person name.
- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with LEGAL_ID_TYPE.
- INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with INDIVIDUAL_ID_TYPE.
- RESIDENCE_COUNTRY_CODE (string): residence country code, using the WIPO country codes.
- STATE_NAME (string): state name.
- CITY_NAME (string): city name.
- ADDRESS_ZONE (string): zone component of the address.
- ADDRESS_STREET (string): street component of the address.
- ZIP_CODE (string): postal code.
- EMAIL (string): e-mail.
- TELEPHONE (string): telephone.
- PERSON_GROUP_CODE (string): person group code.

2.3.8 DESIGN_ANNUITIES (list of annuities for each design).

This table contains the list of annuities for each design.

File identification (must reference the corresponding row in DESIGN):

- FILE_SEQ (string): file sequence.

- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Annuity data:

- ANNUITY_NBR (number): annuity number.
- EXPIRATION_DATE (date): annuity expiration date.
- GRACE_DATE (date): annuity grace date.
- IND_IGNORE (number): indicator (0/1) that the annuity should be ignored for the purposes of payment control.
- IND_PAID (number): indicator (0/1) that the annuity has been already paid.
- COMPLETE_PAYMENT_DATE (date): date on which complete payment took place.

2.4 User document bibliographic data

The following tables contain the bibliographic data for user documents.

2.4.1 USERDOC (basic user document data)

This table contains basic user document data, and the columns are as follows.

User document identification:

- USERDOC_SEQ (string): user document sequence, using codes describing the different sequences of user document numbers.
- USERDOC_SERIES (number): user document series.
- USERDOC_NBR (number): user document number.

Filing data:

- USERDOC_TYPE (string): user document type, using codes describing the different user document types, e.g. oppositions, annuity payments, responses to IP office requests, etc.
- LAW_CODE (number): law code, using specific codes identifying the law which regulates the processing of the file.
- FILING_DATE (date and time): filing date.
- RECEPTION_DATE (date and time): reception date.

Applicant data:

- APLICANT_NOTES (string): applicant notes.
- PERSON_NAME (string): person name.
- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- IND_COMPANY (number): indicator (0/1) that the person is a company.
- LEGAL_NATURE (string): legal nature of the company.

- **LEGAL_ID_TYPE** (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- **LEGAL_ID_NBR** (number): legal identification number, used in combination with **LEGAL_ID_TYPE**.
- **INDIVIDUAL_ID_TYPE** (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- **LEGAL_ID_NBR** (number): legal identification number, used in combination with **INDIVIDUAL_ID_TYPE**.
- **RESIDENCE_COUNTRY_CODE** (string): residence country code, using the WIPO country codes.
- **STATE_NAME** (string): state name.
- **CITY_NAME** (string): city name.
- **ADDRESS_ZONE** (string): zone component of the address.
- **ADDRESS_STREET** (string): street component of the address.
- **ZIP_CODE** (string): postal code.
- **EMAIL** (string): e-mail.
- **TELEPHONE** (string): telephone.
- **PERSON_GROUP_CODE** (string): person group code.

Other data:

- **NOTES** (string): notes.

2.4.2 USERDOC_FILES (list of affected files for each user document)

This table contains the list of files which are affected by each user document.

User document identification (must reference the corresponding row in **USERDOC**):

- **USERDOC_SEQ** (string): user document sequence.
- **USERDOC_SERIES** (number): user document series.
- **USERDOC_NBR** (number): user document number.

Affected file data:

- **FILE_SEQ** (string): file sequence of the affected file.
- **FILE_TYPE** (string): file type of the affected file.
- **FILE_SERIES** (number): file series of the affected file.
- **FILE_NBR** (number): file number of the affected file.

2.4.3 USERDOC_REPRS (list of representatives for each user document)

This table contains the list of representatives for each user document.

User document identification (must reference the corresponding row in **USERDOC**):

- **USERDOC_SEQ** (string): user document sequence.

- USERDOC_SERIES (number): user document series.
- USERDOC_NBR (number): user document number.

Representative data:

- IND_SERVICE (numeric): indicator (0/1) that this representative is the one supplying the service address for the file.
- REPRESENTATIVE_TYPE (string): representative type, using specific codes identifying the type of relationship between the IP office and the representative, e.g. agent, representative, legal advisor, etc.

Person data:

- PERSON_NAME (string): person name.
- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with LEGAL_ID_TYPE.
- INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with INDIVIDUAL_ID_TYPE.
- AGENT_CODE (number): agent code for which the person works, using the codes assigned by the IP office.
- RESIDENCE_COUNTRY_CODE (string): residence country code, using the WIPO country codes.
- STATE_NAME (string): state name.
- CITY_NAME (string): city name.
- ADDRESS_ZONE (string): zone component of the address.
- ADDRESS_STREET (string): street component of the address.
- ZIP_CODE (string): postal code.
- EMAIL (string): e-mail.
- TELEPHONE (string): telephone.
- PERSON_GROUP_CODE (string): person group code.

2.4.4 USERDOC_OWNERS (list of new owners for the annotation)

This table contains the list of owners for each annotation (assignment, change of name and others).

User document identification (must reference the corresponding row in USERDOC):

- USERDOC_SEQ (string): user document sequence.
- USERDOC_SERIES (number): user document series.
- USERDOC_NBR (number): user document number.

Owner data:

- IND_SERVICE (numeric): indicator (0/1) that this is the “main owner” supplying the service address for the file.
- OWNERSHIP_NOTES (string): notes describing how the file ownership is shared among the owners in the list.

Person data:

- PERSON_NAME (string): person name.
- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- IND_COMPANY (number): indicator (0/1) that the person is a company.
- LEGAL_NATURE (string): legal nature of the company.
- LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with LEGAL_ID_TYPE.
- INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with INDIVIDUAL_ID_TYPE.
- RESIDENCE_COUNTRY_CODE (string): residence country code, using the WIPO country codes.
- STATE_NAME (string): state name.
- CITY_NAME (string): city name.
- ADDRESS_ZONE (string): zone component of the address.
- ADDRESS_STREET (string): street component of the address.
- ZIP_CODE (string): postal code.
- EMAIL (string): e-mail.
- TELEPHONE (string): telephone.
- PERSON_GROUP_CODE (string): person group code.

2.5 Agent data

The following tables contain agent's data.

2.5.1 AGENT (basic agent data)

This table contains agent data, and the columns are as follows.

Agent identification:

- AGENT_CODE (number): agent code.

Agent data:

- AGENT_NAME (string): agent name.
- NOTES (string): agent notes.
- IND_INACTIVE (number): indicator (0/1) that the agent is inactive.

2.5.2 AGENT_PERSONS (list of persons working for agent)

This table contains the list of persons working for the agent.

Agent identification (must reference the corresponding row in AGENT):

- AGENT_CODE (number): agent code.

Person data:

- PERSON_NAME (string): person name.
- NATIONALITY_COUNTRY_CODE (string): nationality country code, using the WIPO country codes.
- LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with LEGAL_ID_TYPE.
- INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- LEGAL_ID_NBR (number): legal identification number, used in combination with INDIVIDUAL_ID_TYPE.
- RESIDENCE_COUNTRY_CODE (string): residence country code, using the WIPO country codes.
- STATE_NAME (string): state name.
- CITY_NAME (string): city name.
- ADDRESS_ZONE (string): zone component of the address.
- ADDRESS_STREET (string): street component of the address.
- ZIP_CODE (string): postal code.
- EMAIL (string): e-mail.
- TELEPHONE (string): telephone.
- PERSON_GROUP_CODE (string): person group code.

3 Images data

The second category of information items to be captured is the images data, i.e. the trademark logos, the patent drawings and the design reproductions. This section describes how those images could be handled, and also highlights some of the issues that must be taken into account for developing the data capture strategy.

Images data requires scanning of the source documents, and definition of a data capture strategy must start by selecting which is the most adequate document to be scanned. Maybe the paper files are the only alternative, but other possible sources could be:

- The Register (as discussed in the textual bibliographic data section).
- Technical documents available in the case of patents, e.g. the publication of applications or registrations.

In the same way as already described for the data capture of bibliographic information, the current images must be captured, i.e. the most up-to-date information. This is normally not a problem in the case of trademarks, since the trademark logo is normally not allowed to be updated, but in the case of patents it is normal practice that amended drawings be filed as a reply to objections raised by the examiner. Therefore, some mechanism to assure that up-to-date data is being scanned must be devised.

3.1 Trademark images data

The logo for each mark must be stored as a JPG file (for color logos) or as a TIF file (for black and white logos). Two alternatives could be handed for storing those files:

- The file could be stored within the database, as a large binary column in a new column to be added to the MARK table discussed above.
- The image file could be stored outside the database, as an external file in the server file system. In this case, the name of the external file where the image is located must be stored in a new text column to be added to the MARK table so as to easily locate the image file.

Under the second approach, folders with a very large number of files should be avoided, and two possible approaches are discussed for this:

- Specific folders could be used for each possible combination of file sequence, file type and file series. E.g. if "P" and "S" are used as the file type for product and service marks, and 2000, 2001 and 2002 are the possible series, then six folders could be created (one for each possible combination) and the images must be stored in the appropriate folder. In this way, a limited number of files will be located in each folder.
- A tree-like folder structure could be automatically generated by the system, e.g. using system-generated folders to store a limited number of logos (say 500) and then a second-level folder to contain all the generated folders, etc.

3.2 Patent images data

The case of patent drawings is similar to what was already discussed for trademark logos, but with two important differences:

- The patent drawings must always be in black and white, and therefore TIF images must be used.

- Many drawings could be stored for each file. This implies that a separate table PATENT_IMAGES must be created in order to allow multiple images per file. The key of this table should be the PATENT table key, plus an additional IMAGE_NBR column containing the correlative image number.

3.3 Design images data

The case of design reproductions is similar to what was already discussed for trademark logos and patent drawings, but the following issues must be taken into account:

- The design reproductions may be in black and white or in color, so both TIF images and JPG images may be used.
- Many reproductions could be stored for each file. This implies that a separate table DESIGN_IMAGES must be created in order to allow multiple images per file. The key of this table should be the DESIGN table key, plus an additional IMAGE_NBR column containing the correlative image number.

4 Workflow data

The third category of information items to be captured is the workflow data. This section describes the structure of the tables used to store such data for Trademarks, Patents and Designs, and also highlights some of the issues that must be taken into account for developing the data capture strategy.

During the administrative processing of a file, the IP office performs many activities following the procedures prescribed by the law, e.g. formality examination, publication, substantive examination, opposition proceedings, registration, etc. At any time, each file is in a certain “status” which indicates what is the activity currently being performed on the file. All the “actions” that the IP office may take on the file, cause a change in the “status”, e.g. when the status is “Formality examination” and the action is “Acceptance” then the new status will be “To be published” since now the IP office will have to publish the application. From the perspective of the data capture project, there are two types of information items that could be of interest:

- The “current status” may be captured, indicating the activity the IP office is currently performing on the file.
- The “history of actions” which led to that current status may also be captured, indicating the sequence of actions performed by the IP office during the lifetime of the file.

As part of the definition of the workflow data capture strategy, it must be defined which of the above workflow data items, if any, will be captured. The “history of actions” may be very basic or very detailed, and could also take into account the fact that the application is still pending or not. For example, for pending applications a much more detailed history of actions could be captured, since this information will probably be useful in the subsequent stages of the registration procedure. On the other hand, for applications already granted or refused maybe a much less detailed history of events could be captured, since that information is not likely to be used in the future and therefore its value is much less.

Please refer to the “Configuration data” section below to see examples of workflow configuration.

4.1 Trademark workflow data

The following table contains the trademarks workflow data.

4.1.1 MARK_ACTIONS (mark workflow data).

This table contains mark action data, and the columns are as follows.

File identification (must reference the corresponding row in MARK):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Action data:

- ACTION_TYPE (string): action type, using the codes defined by the IP office workflow.
- ACTION_CATEGORY (string): indicates the category of the action as follows:

- “A”: normal action, which affects the status as indicated in the workflow starting from the current status and using the migration indicated in ACTION_TYPE. If the current status is not compatible with the action type, an error will be raised.
- “S”: special action, which affects the status to the value indicated in SPECIAL_FINAL_STATUS without taking into consideration the current status.
- “N”: note action, which does not affect the status.
- SPECIAL_FINAL_STATUS (string): in case the action is a special action affecting the status without concern of the normal workflow transitions (i.e. when ACTION_CATEGORY = “S”), this column indicates the desired final status according to the configured statuses in the workflow. Otherwise, the column is not used.
- ACTION_DATE (date): action date.
- MANUAL_DUE_DATE (date): process due date to be set manually.
- ACTION_NOTES1 (long string): action notes field 1, depending on the configuration of the action type in the workflow.
- ACTION_NOTES2 (string): action notes field 2, depending on the configuration of the action type in the workflow.
- ACTION_NOTES3 (string): action notes field 3, depending on the configuration of the action type in the workflow.
- ACTION_NOTES4 (string): action notes field 4, depending on the configuration of the action type in the workflow.
- ACTION_NOTES5 (string): action notes field 5, depending on the configuration of the action type in the workflow.
- GENERAL_NOTES (string): general notes.
- ACTION_ORDER (number): the sequential order of the actions, if exists
- ACTION_USER (number): the user who performed the action

4.2 Patent workflow data

The following table contains the patents workflow data.

4.2.1 PATENT_ACTIONS (patent workflow data).

This table contains patent action data, and the columns are as follows.

File identification (must reference the corresponding row in PATENT):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Action data:

- ACTION_TYPE (string): action type, using the codes defined by the IP office workflow.
- ACTION_CATEGORY (string): indicates the category of the action as follows:

- “A”: normal action, which affects the status as indicated in the workflow starting from the current status and using the migration indicated in ACTION_TYPE. If the current status is not compatible with the action type, an error will be raised.
- “S”: special action, which affects the status to the value indicated in SPECIAL_FINAL_STATUS without taking into consideration the current status.
- “N”: note action, which does not affect the status.
- SPECIAL_FINAL_STATUS (string): in case the action is a special action affecting the status without concern of the normal workflow transitions (i.e. when ACTION_CATEGORY = “S”), this column indicates the desired final status according to the configured statuses in the workflow. Otherwise, the column is not used.
- ACTION_DATE (date): action date.
- MANUAL_DUE_DATE (date): process due date to be set manually.
- ACTION_NOTES1 (long string): action notes field 1, depending on the configuration of the action type in the workflow.
- ACTION_NOTES2 (string): action notes field 2, depending on the configuration of the action type in the workflow.
- ACTION_NOTES3 (string): action notes field 3, depending on the configuration of the action type in the workflow.
- ACTION_NOTES4 (string): action notes field 4, depending on the configuration of the action type in the workflow.
- ACTION_NOTES5 (string): action notes field 5, depending on the configuration of the action type in the workflow.
- GENERAL_NOTES (string): general notes.

4.3 Design workflow data

The following table contains the designs workflow data.

4.3.1 DESIGN_ACTIONS (design workflow data).

This table contains design action data, and the columns are as follows.

File identification (must reference the corresponding row in DESIGN):

- FILE_SEQ (string): file sequence.
- FILE_TYPE (string): file type.
- FILE_SERIES (number): file series.
- FILE_NBR (number): file number.

Action data:

- ACTION_TYPE (string): action type, using the codes defined by the IP office workflow.
- ACTION_CATEGORY (string): indicates the category of the action as follows:

- “A”: normal action, which affects the status as indicated in the workflow starting from the current status and using the migration indicated in ACTION_TYPE. If the current status is not compatible with the action type, an error will be raised.
- “S”: special action, which affects the status to the value indicated in SPECIAL_FINAL_STATUS without taking into consideration the current status.
- “N”: note action, which does not affect the status.
- SPECIAL_FINAL_STATUS (string): in case the action is a special action affecting the status without concern of the normal workflow transitions (i.e. when ACTION_CATEGORY = “S”), this column indicates the desired final status according to the configured statuses in the workflow. Otherwise, the column is not used.
- ACTION_DATE (date): action date.
- MANUAL_DUE_DATE (date): process due date to be set manually.
- ACTION_NOTES1 (long string): action notes field 1, depending on the configuration of the action type in the workflow.
- ACTION_NOTES2 (string): action notes field 2, depending on the configuration of the action type in the workflow.
- ACTION_NOTES3 (string): action notes field 3, depending on the configuration of the action type in the workflow.
- ACTION_NOTES4 (string): action notes field 4, depending on the configuration of the action type in the workflow.
- ACTION_NOTES5 (string): action notes field 5, depending on the configuration of the action type in the workflow.
- GENERAL_NOTES (string): general notes.

4.4 User document workflow data

The following table contains the user documents workflow data.

4.4.1 USERDOC_ACTIONS (user documents workflow data)

This table contains user documents action data, and the columns are as follows.

User document identification (must reference the corresponding row in USERDOC):

- USERDOC_SEQ (string): user document sequence.
- USERDOC_SERIES (number): user document series.
- USERDOC_NBR (number): user document number.

Process file data: these columns further control the process which is to receive the action, as per the following guidelines:

- a) if the user document type is configured so as to generate only one process, the process file columns must be null.
- b) if the user document type is configured so as to generate a separate process for each affected file, when the process file columns are null then the action will be inserted in each of the processes related to the user document for each of the affected files. E.g. in case of an assignment affecting 20 files, then 20 actions will be inserted, one in each of the 20 processes related to the user document.

- c) if the user document type is configured so as to generate a separate process for each affected file, when the process file columns are not null then the action will be inserted only in the specific process related to the indicated file (obviously the columns must refer to one of the files affected by the user document). E.g. in case of an assignment affecting 20 files, then only one actions will be inserted in the process related to both the user document and the indicated file.

The columns to indicate the process file are as follows:

- PROCESS_FILE_SEQ (string): file sequence of the affected file.
- PROCESS_FILE_TYPE (string): file type of the affected file.
- PROCESS_FILE_SERIES (number): file series of the affected file.
- PROCESS_FILE_NBR (number): file number of the affected file.

Action data:

- ACTION_TYPE (string): action type, using the codes defined by the IP office workflow.
- ACTION_CATEGORY (string): indicates the category of the action as follows:
 - “A”: normal action, which affects the status as indicated in the workflow starting from the current status and using the migration indicated in ACTION_TYPE. If the current status is not compatible with the action type, an error will be raised.
 - “S”: special action, which affects the status to the value indicated in SPECIAL_FINAL_STATUS without taking into consideration the current status.
 - “N”: note action, which does not affect the status.
- SPECIAL_FINAL_STATUS (string): in case the action is a special action affecting the status without concern of the normal workflow transitions (i.e. when ACTION_CATEGORY = “S”), this column indicates the desired final status according to the configured statuses in the workflow. Otherwise, the column is not used.
- ACTION_DATE (date): action date.
- MANUAL_DUE_DATE (date): process due date to be set manually.
- ACTION_NOTES1 (long string): action notes field 1, depending on the configuration of the action type in the workflow.
- ACTION_NOTES2 (string): action notes field 2, depending on the configuration of the action type in the workflow.
- ACTION_NOTES3 (string): action notes field 3, depending on the configuration of the action type in the workflow.
- ACTION_NOTES4 (string): action notes field 4, depending on the configuration of the action type in the workflow.
- ACTION_NOTES5 (string): action notes field 5, depending on the configuration of the action type in the workflow.
- GENERAL_NOTES (string): general notes.
- ACTION_ORDER (number): the sequential order of the actions, if exists
- ACTION_USER (number): the user who performed the action

5 Configuration data

In the above discussions about data capture of different data items, some specific codes are mentioned. This section discusses all those codes and provides hints about how to configure them for the specific needs of the IP office. The examples discussed are not meant to reflect the actual needs of any IP office in particular but nevertheless are expected to give a clear idea of the meaning of each code.

Specific configuration tables for all the codes are required, and also the bibliographic data tables discussed above must be altered to add the adequate foreign keys to make reference to such configuration tables in order to validate the codes used.

The summary of all the code is as follows:

- Codes used for document numbering:
 - FILE_SEQ (string): file sequence.
 - FILE_TYPE (string): file type.
 - USERDOC_SEQ (string): user document sequence, using codes describing the different sequences of user document numbers.
 - REGISTRATION_TYPE (string): registration type code.
- Codes defined in WIPO standards:
 - NATIONALITY_COUNTRY_CODE (string): nationality country code.
 - RESIDENCE_COUNTRY_CODE (string): residence country code.
 - VIENNA_CATEGORY (number): Vienna category.
 - VIENNA_DIVISION (number): Vienna division.
 - VIENNA_SECTION (number): Vienna section.
 - NICE_CLASS_NBR (number): Nice class number.
 - IPC_EDITION (string): IPC edition.
 - IPC_SECTION (string): IPC section.
 - IPC_CLASS (string): IPC class.
 - IPC_SUBCLASS (string): IPC subclass.
 - IPC_GROUP (string): IPC group.
 - IPC_SUBGROUP (string): IPC subgroup.
 - LOCARNO_CLASS_NBR (number): Locarno class number.
 - LOCARNO_SUBCLASS_NBR (number): Locarno subclass number.
- Codes used for configuring document types:
 - APPLICATION_TYPE (string): application type, using specific codes which describe each of the Industrial Property titles issued by the IP office, e.g. trademarks, certification marks, geographical indications, patents, utility models, industrial designs, etc.
 - APPLICATION_SUBTYPE (string): application subtype, using specific codes which refine the APPLICATION_TYPE in order to define variations of the main type. For example, in the case of the application type “patents”, separate subtypes may be needed for “national patents”, “PCT patents”, “regional patents”, etc.
 - USERDOC_TYPE (string): user document type, using codes describing the different user document types, e.g. oppositions, annuity payments, responses to IP office requests, etc

- LAW_CODE (number): law code, using specific codes identifying the law which regulates the processing of the file.
- RELATIONSHIP_TYPE (string): relationship type, using specific codes identifying each type of relationship that a file may have with another file. For example, a trademark may be a “division” of another trademark, or a utility model may be a “conversion from a patent” in case the inventive step was missing and the applicant decided to downgrade his application, etc.
- Codes used for person identification numbers:
 - LEGAL_ID_TYPE (string): legal identification type, used for both companies and individuals (e.g. tax authorities identification), using a specific code identifying this type of numbering.
 - INDIVIDUAL_ID_TYPE (string): individual identification type, used for individuals but not for companies (e.g. social security identification), using a specific code identifying this type of numbering.
- Codes used in the workflow:
 - ACTION_TYPE (string): action type, using specific codes for each type of action to be recorded in the workflow.
 - SPECIAL_FINAL_STATUS (string): in case the action is a special action affecting the status without concern of the normal workflow transitions (i.e. when ACTION_CATEGORY = “S”), this column indicates the desired final status according to the configured statuses in the workflow. Otherwise, the column is not used.
 - ACTION_USER (number): the code identifying the user who performed the workflow action
- Codes used for representatives:
 - AGENT_CODE (number): agent code for which the person works. This code is recorded in the AGENT table described in the bibliographic data.
 - REPRESENTATIVE_TYPE (string): representative type, using specific codes identifying the type of relationship between the IP office and the representative, e.g. agent, representative, legal advisor, etc.

5.1 Codes for document numbering

The following codes are used as part of the keys identifying files and user documents.

5.1.1 File type

The file type (FILE_TYPE) is used as part of the file identification to distinguish file number sequences based on the application type, i.e. on the “legal” aspects of the document. Normally, separate sequences are used for marks, geographical indications, patents, utility models, industrial designs, etc. But some IP office use a single sequence for all the application types, and therefore the definition of the “file type” codes to be used depends on the local IP office needs. For example:

M	Mark file
C	Collective mark file
G	Geographical indication file
a	Patents
u	Utility Certificate
f	Industrial Designs

5.1.2 File sequence

The file sequence (FILE_SEQ) is used as part of the file identification to distinguish file number sequences based on other factors apart from the application type, e.g. on the reception place or reception mechanism. Normally a single code is used for this concept but under certain circumstance the code could be useful, depending again on the local IP office needs. Examples of situations where the FILE_SEQ code could be useful are:

- Some large offices use a separate sequence for each regional office where reception takes place, so the FILE_SEQ could reflect this concept.
- Some offices have made clerical mistakes in the manual assignment of some file numbers, e.g. assigning the same number to two o may be more files. In these, cases, normally a “letter” is used to distinguish these files, e.g. 1234/A, 1234/B, etc, and in these cases the FILE_SEQ could be used to reflect this concept.

For example:

A	Duplicate A
B	Duplicate B
C	Duplicate C
D	Duplicate D
E	Duplicate E
I	Duplicate I
M0	Received in main office
M1	Received in Regional Office #1
M2	Received in Regional Office #2

5.1.3 User document sequence

The user document sequence (USERDOC_SEQ) is used as part of the user document identification, in combination with the “user document series” and the “user document number”. A “user document” is any document filed by the user which is not an application for the registration of a new Industrial Property right. Some offices assign numbers to the user document using a single sequence, but others use specific sequences for various groups of user documents, e.g. one sequence for user documents affecting ownership, another sequence for oppositions, and a third sequence for the rest.

For example:

S1	User document affecting ownership
S2	Oppositions
S3	Other user documents

5.1.4 Registration type

The registration type (REGISTRATION_TYPE) is used as part of the key identifying registrations, in combination with the registration series, the registration number and the registration duplicate. This code should reflect the different sequence used for registration numbers, for example:

M	Trademark registrations
P	Patent registrations

- U** Utility model registrations
- S** Industrial design registrations

As a clarification, please note that since our hypothetical IP office uses separate file sequences for mark files (code M), collective mark files (code C) and geographical indication files (code G), but a single code for the registration sequence, this means that a new registration number is allotted from that single registration sequence M (Trademark registrations) which is therefore shared by marks, collective marks and geographical indications.

5.2 Codes pre-defined by WIPO standards

Some of the codes are already pre-defined by WIPO standards, and in these cases adherence to such standards is required. The list of codes and the WIPO site URL providing detailed documentation for each of them is as follows:

- Country codes (used for both NATIONALITY_COUNTRY_CODE and RESIDENCE_COUNTRY_CODE): please refer to <http://www.wipo.int/export/sites/www/standards/en/pdf/03-03-01.pdf>
- Vienna classification for the figurative elements of trademarks (detailed codes are VIENNA_CATEGORY, VIENNA_DIVISION and VIENNA_SECTION): please refer to <http://www.wipo.int/classifications/vienna/en/>
- Nice classification for the goods and services protected by trademarks (code NICE_CLASS_NBR): please refer to <http://www.wipo.int/classifications/nice/en/>
- International Patent Classification (detailed codes are IPC_EDITION, IPC_SECTION, IPC_CLASS, IPC_SUBCLASS, IPC_GROUP and IPC_SUBGROUP): please refer to <http://www.wipo.int/classifications/ipc/en/>
- Locarno Classification for Industrial Designs (detailed codes are LOCARNO_CLASS_NBR and LOCARNO_SUBCLASS_NBR): please refer to <http://www.wipo.int/classifications/locarno/en/>

5.3 Codes for document types

The following codes allow a classification of the different documents received by the IP office.

5.3.1 Application type

The application type (APPLICATION_TYPE) describes each of the Industrial Property titles issued by the IP office, e.g. trademarks, certification marks, geographical indications, patents, utility models, industrial designs, etc. For example:

- GEO** Geographical indication
- MAR** Trademark
- COL** Collective mark
- PAT** Patent
- UC** Utility Certificate
- ID** Industrial Designs

5.3.2 Application subtype

The application subtype (APPLICATION_SUBTYPE) further refines the APPLICATION_TYPE in order to define variations of the main type. For example, in the case of the application type “patents”, separate subtypes may be needed for “national patents”, “PCT patents”, “regional patents”, etc. For example:

Type	Subtype	Description
COL	A	Collective mark
GEO	A	Geographical indication
MAR	A	National trademark
MAR	B	International trademark
PAT	NA	National patent
PAT	I1	PCT patent - Chapter I
PAT	I2	PCT patent- Chapter II
UC	NA	Utility Certificate
ID	NA	Industrial Design

In the above example, the hypothetical IP office is a member of Madrid, and so two variations of the “Trademark” application type exist (one for national trademarks and another for international trademarks) and is also member of PCT, and so three variations of the “Patent” application type exists (one for national patents, another for PCT patents under Chapter I of the PCT, and a third one for PCT patents under Chapter II of the PCT).

5.3.3 User document type

The user document type code (USERDOC_TYPE) allows classification of the different user documents received in the IP office. Since there may be many types, a grouping of them is useful. For example:

Code	Group	Type
03	Certificate	Any other certificate
02	Certificate	Certificate of registration
41	Certificate	Certificate of renewal
26	Certificate	Certified copy of trademark application
38	Certificate	License Certificate
114	Changes	Application for an Alteration of a Registered Trademark
111	Changes	Application for the Rectification of the Register
115	Changes	Application to Strike off Goods
04	Changes	Association of application
73	Changes	Change in Ownership for Patent (Merger)
10	Changes	Change of name
17	Changes	Change of name + Certificate
09	Changes	Change of trade address
75	Changes	Change of trade address + Certificate
07	Changes	Correction of a clerical error

05	Changes	Disclaimer / conditions in registration
08	Changes	Request to amend trademark
06	Changes	Request to transfer to Part B
34	Misc	Letter
999	Misc	Nullified number
35	Misc	Pre-application Search
27	Misc	Request
84	Misc	Request for Extension of Time
40	Misc	Request for Recordal
13	Misc	Request for statement of grounds of decision
37	Misc	Search + Examination
31	Oppositions	Attendance of hearing
12	Oppositions	Counterstatement to opposition
30	Oppositions	Declaration supporting evidence
29	Oppositions	Evidence of opposition
11	Oppositions	Notice of opposition
36	Oppositions	Rectification/Removal of a Trademark from the Register
135	Oppositions	Withdrawal of Opposition
56	Payments	Grant and Publication fee
50	Payments	Patent Amendment fee
44	Payments	Patent Annuity
55	Payments	Patent Annuity + 2nd Year
58	Payments	Patent Application
57	Payments	Patent Application + 2nd Year Annuity
33	Payments	Payment
39	Payments	Registration and Publication Fee
46	Quits	Allow to Lapse
45	Quits	Removal of a Trademark from the Register
14	Quits	Request for cancellation of entry
19	Quits	Request to abandon an application
20	Quits	Request to cancel a registered trademark
47	Quits	Request to withdraw an Application
147	Quits	Request to withdraw user doc
23	License	Alteration of a License
21	License	Application for a License
22	License	Cancellation of a License
28	Renewals	Late renewal
25	Renewals	Late Renewal Fee
66	Renewals	Renewal + Certificate

77	Renewals	Renewal + Certificate + Late Fee
18	Renewals	Renewal of a trademark
24	Service	Filing authorization (without application)
15	Service	Substitution of an address for service
112	Transfers	Applications for Directions of Assignment without Goodwill
16	Transfers	Assignment
32	Transfers	Assignment without goodwill
17C	Transfers	Merger (over 12 months)
17A	Transfers	Merger (1-6 months)
17B	Transfers	Merger (6-12 months)
113	Transfers	Partial Assignments

5.3.4 Law type

The law code (LAW_CODE) identifies the law which regulates the processing of the file. For example:

- 1** Trademarks Act
- 3** Patents Act 1954
- 4** Patents Act 1996

5.3.5 Relationship type

The relationship types (RELATIONSHIP_TYPE) identify each type of relationship that a file may have with another file. The relationship types are specified by the law, for example a trademark may be a “division” of another trademark, or a utility model may be a “conversion from a patent” in case the inventive step was missing and the applicant decided to downgrade his application, etc. For example:

MRE	Mark renewal
MDI	Mark division
MMG	Mark merging
PDI	Patent division
PEN	Patent enhancement
PCH	Patent change
MCH	Mark change

5.4 Codes for person identification numbers

For the purposes of assigning identification numbers to persons (both natural and legal persons) a couple of codes are used as follows.

The legal identification type (LEGAL_ID_TYPE) is used for both companies and individuals. Normally identification numbers assigned by tax authorities or the Register of Companies are used, For example:

RC	Register of Companies registration number
TX	Tax Register identification number

The individual identification type (INDIVIDUAL_ID_TYPE) allows identification of individuals but not companies, For example:

SSN Social Security Number
CI National Identity document
PP Passport number

5.5 Codes for the workflow

As it was already mentioned, the workflow can be graphically depicted as a “state transition diagram”, where each node corresponds to a “status” and each arrow connecting two nodes corresponds to an “action”. Therefore, recording of an action when the file is in a specific status will cause a change in the status as indicated by the arrow departing such initial status and leading to a final status.

To clarify the above concept, let’s show a possible workflow for the processing of trademark files in a hypothetical IP office. Each row indicates that when a trademark is in the “initial status” and an action of the “action type” is taken by the IP office, the status is set to the “final status”:

Initial status	Action type	Final status
Data capture (001)	Data was captured (DWC)	Formality checking (002)
Formality exam (002)	Letter of defects (LOD)	Awaiting response - formality (003)
Awaiting response - formality (003)	Response received (RES)	Formality exam (002)
Formality exam (002)	Formality exam OK (FOK)	Substantive exam (004)
Substantive exam (004)	Letter of defects (LOD)	Awaiting response – substance (003)
Awaiting response – substance (003)	Response received (RES)	Substantive exam (004)
Substantive exam (004)	Decision to refuse (REF)	Refused (005)
Substantive exam (004)	Acceptance (ACC)	To be published (006)
To be published (006)	Publication (PUB)	Awaiting oppositions (007)
Awaiting oppositions (007)	No oppositions received (NOP)	To be granted (008)
Awaiting oppositions (007)	Oppositions received (OPO)	Opposed (009)
Opposed (009)	Decision to refuse (REF)	Refused (005)
Opposed (009)	Decision to grant (GRA)	To be granted (008)
To be granted (008)	Registration (REG)	Registered (010)
Registered (010)	Expiration (EXP)	Expired (011)
Registered (010)	Cancellation (CAN)	Cancelled (012)
Registered (010)	Removal for non-use (REM)	Removed for non-use (013)

As already mentioned, the workflow data has two parts:

- The “current status”, which is recorded as an action with ACTION_CATEGORY = “S”, i.e. a special action which affects the status to the value indicated in SPECIAL_FINAL_STATUS without taking into consideration the current status.
 - The history of events, which is recorded as a series of actions with ACTION_CATEGORY = “N”, i.e. a note action which does not affect the status.

Both types of actions may contain additional information in the “notes” fields, e.g. the “publication” action may record the journal number where publication took place, etc.

Another code used in relation to the workflow is the user (ACTION_USER) identifying the user who performed the workflow action. Both active and inactive users must be included in this configuration tables, since actions may be associated with staff members no longer working in the IP office.

5.6 Codes for representatives

The following codes are related to the representatives.

The representative type code (REPRESENTATIVE_TYPE) identifies the type of relationship between the IP office and the representative, For example:

AG	Agent
RE	Representative
AS	Address for Service