

**DOC-52-PAPT-07-01001**  
**Attachment 6**  
**IRIS – Background on Services**

Page 1 of 20

**1. Electronic Information Centers &  
The Lutrelle F. Parker, Sr. Memorial Law Library (Parker Law Library)**

Electronic Information Centers (EICs) are information facilities organizationally under the Scientific and Technical Information Center (STIC). The EICs are satellite libraries located in each of the Patent Office's Technology Centers. Each EIC is dedicated to supporting the needs of a specific Technology Center (TC). EICs provide technology specific information, training and assistance on the use of literature resources, primarily to patent examiners and TC staff. With the exception of the Parker Law Library, the majority of each EIC's customers are Patent Technology Center examiners and managers. The EICs also provide some support for other USPTO organizations on an as-needed basis.

The Electronic Information Centers (EICs) are led by Government Team Leaders or Supervisors and include one or more Government reference desk staff and Government searchers.

The contractor provides additional online research, reference desk support and library technical support staff for these facilities. Specifically, this support includes: helping to identify and assess literature resources; search electronic and print literature resources (commercial databases, internet, in-house resources etc.) for information; format results; help obtain full text information; deliver results and information to USPTO examiners and staff; assist in evaluating the quality and timeliness of EIC services; develop and help implement recommendations to improve or enhance services; provide reference assistance; provide instructional support and one-on-one assistance (on-the-spot consultation) on searches, searching and resources; provide technical support; provide collection management support; assist in outreach and marketing efforts, and provide overall library support services and facilities operation support.

Although the goal is to provide as many documents as possible in electronic format, a number of documents in paper format are still delivered to examiners or to specified locations.

Instructional support provided within the EICs primarily focuses on:

- Educating patent examiners on the availability of EIC services.
- Educating and assisting patent examiners on the use of non-patent literature as a prime resource for prior art.
- Educating patent examiners on database selection.
- Providing advanced search strategy training and assistance for both in-house and externally obtained databases (vendors typically provide basic training on their own systems and other IRIS contract staff provide training on in-house automation systems).

Some contractor trainers (Information Resource Technology Providers for example) are assigned to support specific TCs. Those trainers work with EIC staff. Therefore, EIC and training staff assigned to support specific Technology Centers are co-located whenever possible.

Outreach and Marketing - EICs utilize outreach and marketing methods to connect with their patrons including new examiner orientations, service presentations, demonstrations on resources and materials, and tours of STIC and EIC facilities. Promotional materials are provided, such as STIC and EIC flyers, and commercial database vendor materials are available. Each EIC invites the examiners and managers in their TC to an annual open house. All STIC information centers support the outreach efforts of STIC at the annual USPTO Community Day event.

**IRIS – Background on Services****STIC Chart on USPTO Organizations Served**

The following charts provide the main technology categories and subcategories, organizations primarily served, and the STIC information centers that provide support to those organizations.

<b>Main Technology Categories</b>	<b>Technologies</b>	<b>Organizations Primarily Served</b>	<b>STIC Information Center</b>
Foreign Patents	Foreign Patents and related materials	All Patent Organizations	Main STIC (Shares facilities with EIC1600/2900)
Legal	Legal	OPLA* & BPAI**	Parker Law Library
Chemical	Biotechnology and Organic Chemistry	TC1600	EIC1600/2900 (a.k.a. Biotechnology Information Branch)
Chemical	Chemical and Materials Engineering	TC1700	EIC1700
Electrical	Computer Architecture, Software, and Information Security	TC2100	EIC2100
Electrical	Communications	TC2600	EIC2600
Electrical	Semiconductors, Electrical and Optical Systems, and Components	TC2800	EIC2800
Designs	Designs	TC2900	EIC1600/2900
Mechanical	Transportation, Construction, Electronic Commerce (Business Methods), Agriculture, National Security, and License and Review	TC3600	EIC3600
Mechanical	Mechanical Engineering, Manufacturing	TC3700	EIC 3700
Re-Exam	Re-exams of all issued patents	TC3900	Parker Law Library and all other EICs

\* OPLA = Office of Patent Legal Administration

\*\* BPAI = Board of Patent Appeals and Interferences

**IRIS – Background on Services**

**Technologies handled by each Technology Center**

Tech Center 1600—Biotechnology and Organic Chemistry

1610 Organic Compounds: Bio-affecting, Body Treating, Drug Delivery, Steroids, Herbicides, Pesticides, Cosmetics, and Drugs

1620 Organic Chemistry

1630 Molecular Biology, Bioinformatics, Nucleic Acids, Recombinant DNA and RNA, Gene Regulation, Nucleic Acid Amplification, Animals and Recombinant Plants, Combinatorial/Computational Chemistry

1640 Immunology, Receptor/Ligands, Cytokines Recombinant Hormones, and Molecular Biology

1650 Fermentation, Microbiology, Isolated and Recombinant Proteins/Enzymes

1660 Plants

Tech Center 1700--Chemical and Materials Engineering

1710 Synthetic Resins

1720 Fluid Separation & Agitation, Metal Foundry, Welding, Plastic Molding Apparatus, Fuels & Related Compositions

1730 Glass & Paper Making, Tobacco, Non-Metallic Molding, Adhesive Bonding, Tires & Coating Apparatus

1740 Metallurgy, Electrochemistry, Cleaning, Disinfecting, Sterilizing, Analytical Chemistry & Wave Energy

1750 Chemical Products & Processes, Solar Cells & Sputtering Apparatuses

1760 Food Technology, Petroleum Processing, Coating & Etching

1770 Stock Materials & Miscellaneous Articles

Tech Center 2100--Computers

2120 Miscellaneous Computer Applications

2130 Cryptography, Security

2140 Computer Networks

2150 Computer Networks

2170 Graphical User Interfaces, Databases

2180 Computer Architecture

Tech Center 2600--Communications

2610 Televisions

2620 Image Analysis, Fax

2630 Digital, Optical & General Communications

2640 Audio & Wired Telephone

2650 Dynamic Information Storage & Retrieval & Speech Signal Processing

2660 Multiplex Communications

2670 Computer Graphics & Display Systems

2680 Radio Telecommunications

Internet Art distributed to Art Units based on claimed function or hardware.

Tech Center 2800--Physics, Optics, Systems Components & Electrical Engineering

2810 Semiconductors, Electrical Circuits, Static Memory & Digital Logic

2830 Power Generation and Distribution, Music, Electrical Components and Control Circuit

2850 Photocopying, Recorders, Printing, Measuring & Testing

2870 Liquid Crystals, Optical Elements, Optical Systems, Fiber Optics, Lasers, Electric Lamps, Registers, Optics Measuring, Radiant Energy

Technology Center 2900--Designs

**IRIS – Background on Services**

Tech Center 3600--Transportation, Construction, Agriculture, Electronic Commerce and National Security

- 3610 Surface Transportation
- 3620 Electronic Commerce (Business Methods)
- 3630 Static Structures, Supports and Sign Exhibiting
- 3640 Aeronautics, Agriculture, Plant and Animal Husbandry, Weaponry, Nuclear Systems and Licensing & Review
- 3650 Material Handling
- 3660 Computerized Vehicle Controls & Navigation, Radio Wave and Acoustic Wave Communication
- 3670 Wells, Earth Boring/Moving/Working, Excavating, Mining, Harvesters, Bridges, Roads, Closures, Connections, Hardware and Furniture
- 3680 Machine Elements and Power Transmissions

Tech Center 3700--Mechanical Engineering, Manufacturing and Products

- 3710 Amusement and Education Devices
- 3720 Packages and Containers, Manufacturing Devices & Processes, Machine Tools & Hand Tools
- 3730 Medical Instruments, Diagnostic Equipment, Treatment Devices, Surgery, Surgical Supplies
- 3740 Wearing Apparel & Textile Manufacturing, Thermal & Combustion Technology, Motive & Fluid Power Systems
- 3750 Fluid Handling & Dispensing
- 3760 Body Treatment, Kinestherapy, and Exercising

**STIC Information Center – Government vs Contract Staffing Charts**

The ratio of government versus contract staff varies with each Information Center.

The Lutrelle F. Parker, Sr. Memorial Law Library (Parker Law Library) primarily supports the legal research needs of the Office of Patent Legal Administration (OPLA) and the Board of Patent Appeals and Interferences (BPAI). The following chart shows the current configuration of staff assigned to the Parker Law Library.

<b>Lutrelle F. Parker, Sr. Memorial Law Library</b>	
<b>Government Staff</b>	<b>Contract Staff</b>
None	Law Specialist

The following chart shows the current configuration of staff assigned to EIC1600/2900.

<b>EIC1600/2900</b>	
<b>Government Staff</b>	<b>Contract Staff</b>
Team Leader or Supervisor	Reference Desk Specialists
Searchers	Searchers Contract searchers only recently started providing support to this EIC.
Library technical support staff	ITRPS

**IRIS – Background on Services**

The following chart shows the typical configuration of staff assigned to the rest of the EICs.

<b>EICs 1600, 1700, 2100, 2600, 2800, 3600, 3700</b>	
<b>Government Staff</b>	<b>Contract Staff</b>
Team Leader	Searchers
Reference Desk Specialist	Library technical support staff
Searchers	ITRPS

**EIC Environment**

As the need for services changes, the need for contract support changes, both in skills required as well as in numbers of staff. Examples of changes include:

- An emphasis on providing direct access from examiner's desktops to electronic resources.
- An emphasis on providing requested materials electronically to examiners and patrons.
- Implementation of the "Virtual EIC" to allow both on-site and off-site examiners and patrons access to services from their desktops.
- A push for search innovations.
- On-going review of training support needs and capabilities, (example: implementation of 15 minute demos on information resource tools in the EICS, training of patrons on non-patent literature resources and EIC services etc.).
- Reviewing EIC functions in collaboration with the government to identify alternative methods to conduct business, identify new services and new resources, and identify innovation or alternatives to address growing workloads and to improve turnaround times.

Virtual EIC (VEIC): With the implementation of the Patent Hoteling Program (PHP), STIC launched its "Virtual EIC" initiative. Each EIC has been provided with the same suite of tools (collaboration tools) that remotely located examiners use. These tools facilitate audio, video and electronic communication. These tools allow examiners and staff participating in the PHP program, and examiners and staff on campus who have also been provided these tools, with the ability to seamlessly communicate with STIC information centers for services. Although all EIC staff (government and contract) support the VEIC function, in each VEIC, the reference desk staff are the first point of contact.

**Searching**

Government and contract staffs conduct a number of different types of searches to locate resources and to find full text documents. Selection of some search types are affected by the technology searched. For example:

Sequence searches are usually only needed for examiners in TC 1600 technologies.

Structure searches are usually only needed for examiners in TC 1600, TC1700 and sometimes in TC2800.

The following chart provides examples of the types and number of searches conducted in STIC information centers by all staff (government and contract staff).

## IRIS – Background on Services

Search Type	FY06 - # of Searches	Avg Search & Prep Time	Comments
ABSS/ Sequence	12,700	15 to 20 minutes	ABSS stands for Automated Biotechnology Sequence Search. Nucleic acids or amino acid sequences are searched to identify prior art. Time listed is for standard sequence searches. Most sequence searches are standard sequence searches. Complex searches may take 60 minutes or longer to complete.
Foreign Patent	8,900	10 to 15 minutes	Locate foreign patent documents in full text. (Almost all of the foreign patent search workload is handled by Government staff.)
Litigation	2,000	15 to 30 minutes	Search for the legal status of the patent and for references to litigation (cases and case status, court decisions, or journal articles on legal decisions).
Patent Family	5,900	10 to 15 minutes	Search a patent to determine the patent family. Primarily used to determine if an English language patent equivalent is available for a foreign language patent.
PLUS	36,600	5 to 10 minutes	The Patent Linguistic Utility System is an in-house USPTO "query by example" search system. The system creates a list of words in patent applications and checks for those same words in granted US patents. Results include a list of patents most closely related to the application and a list of classes and subclasses where suggested patents are found. Expect this to become a fully automated search process during the 1 <sup>st</sup> year of this contract.
Structure	4,300	30 to 120 minutes	Chemical structures are searched to identify prior art.
Text	9,200	Varies – depends on technology and on text search category.  May take an expert searcher up to one full day to complete some standard searches for some technologies.	Words or terms are used to search non-patent literature and patent** databases in order to identify prior art. Text search categories as of June 2006 include: <ul style="list-style-type: none"> <li>- <b>Rush:</b> these searches take precedence over all other searches. Rush searches must be approved by the examiner's SPE (supervisory patent examiner). The goal is 24 hour turnaround.</li> <li>- <b>Fast and Focused:</b> some EICs offer this search category – done for search requests that are narrowly defined and can be done in about 2 hours (never should exceed 3 hours). These searches take precedence over regular text searches. However each EIC providing the Fast and Focused Search option sets a limit on the number of fast and focused search requests accepted each day.</li> <li>- <b>Standard:</b> all remaining text searches. The search request with the oldest submission date is handled first in each facility. The goal is to complete these searches within 48 hours (2 days).</li> </ul>

**IRIS – Background on Services**

Other	600	Varies, usually are short searches	Any search that does not fit into one of the other categories, i.e. inventor, product and company searches.
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\*\* Patent examiners are responsible for searching in-house systems for US and foreign patents. However, in addition to non-patent literature databases, EIC searchers also search selected foreign patent databases, in the course of a typical text search.

Historically, the difficulty of the search type determined which staff would conduct the search.

- o Reference desk specialists primarily handle foreign patent, litigation, and patent family searches
- o Library Technicians process PLUS searches. However, during this contract, the USPTO is planning to fully automate the PLUS search function so that examiners can generate results directly from their desktop.
- o Searchers primarily handle the remaining search types.

Commercial Databases

- o The Parker Law Library focuses primarily on searching legal databases.
- o EICs 1600/2900 and 1700 searchers, (and to some extent EIC 2800 searchers) heavily search the CAS STN databases (over 100 databases)
- o The rest of the EICs heavily search Dialog databases (over 500 databases)
- o There are other commercial and in-house databases and resources also searched by these staffs. (See PWS Attachment E for Commercial Databases available at the USPTO.)

Prior Art - This is a critical concept that directly impacts the search process as the USPTO needs older technological information, not “state of the art” information, to support the examination of patent applications. See “Attachment A - USPTO Mission and Work Environment”.

Searcher Expertise

Searchers must efficiently and cost effectively search commercial databases in order to obtain quality results. In order to search the extensive collections of materials available on information resources for prior art, searchers need to know more than just the basic mechanics of searching (Boolean logic, proximity operators and nesting).

- Searchers must be able to effectively utilize advanced search functions.
- Searchers must be flexible and be able to use varying search commands that may be unique to specific database vendors. Currently, each vendor has their own search conventions and customizes search commands and functions for their products.
- Searchers must know how to develop complex search strategies.
- Searchers must be able to adjust for the type of results the databases provide (abstracts or full text) and adjust search strategies as the search progresses (based on interim search results) to efficiently and cost effectively mine databases for pertinent prior art.
- Searchers must either have or must rapidly develop subject-area expertise in order to effectively search the technological area supported.

It takes a considerable amount of time for searchers to develop into effective and efficient expert searchers. Depending on the technology searched, it can take up to a year for a newly hired searcher to become an independent searcher. It can take several years for a searcher in some technologies to reach expert status.

Search Assistance – searchers provide examiners or USPTO staff with support on: identification of appropriate databases and tools for searching reinforcing basic search techniques; use of database specific commands; development of art specific search strategies; use of advanced search techniques; and evaluation of search results.

**IRIS – Background on Services**

Page 8 of 20

Search Quality Evaluation – Contract searchers are subject to search quality reviews. The Government provides reviews to contract managers on search quality by completing review forms for new and experienced searchers.

Searcher Performance Standards - performance standards for search turnaround vary based on the technology searched. The standards that were developed specify expected progress for new searchers, searchers at intermediate levels, and at the full performance (expert) level. Standards are customized for the technologies serviced by each EIC.

Workload Tracking Systems - The contactor shall input data on searches conducted in STIC information centers and on search assistance provided into the appropriate STIC workload tracking system(s). Desktop access is provided to the current version(s) of workload systems. These systems are currently accessed via Microsoft Access databases, but may be moved to other platforms during the course of this contract.

Innovations concerning search related functions

STIC strives to customize services to the needs of USPTO patent examiners. Search processes and functions are under continual review resulting in enhancements and the implementation of new programs. Examples - In order to better respond to examiner's needs for rapid search results, a special category of search was created in recent years called the "Fast and Focused" search. The examiner must submit a narrowly defined search request which allows the searcher to target search results and complete the search within 2 hours.

## **2. Automation Training and Related Training Support**

The USPTO's training programs are extremely dynamic programs with high visibility throughout all managerial and staffing levels in the USPTO. This program has high dollar costs and must return tangible business value. The resources devoted to this program must be closely managed to ensure the maximum utilization of available resources. Contractor staffed programs are under intense scrutiny by recipients of the program as well as Patent Business area management, and for the contractor to be successful, the contractor must be proactive, innovative and responsive, while also understanding the sensitivities associated with working in close collaboration with the Government and the decision making process. In order to effectively operate in this dynamic environment, the contractor must be able to quickly establish and implement plans and quickly investigate and respond to questions, problems, and issues.

The contractor provides instructional support for any program or element related to: USPTO business processes; information resources and services; information sharing; and automation systems development, implementation and integration. Instructional support is provided for internally developed and deployed automation tools and also for in-house and externally available virtual tools and electronic information resources (i.e. both proprietary and commercial off-the-shelf).

Instructional support is provided for formal training (e.g. classroom training, laboratory style training) and for informal training (e.g. demonstrations and individualized assistance).

ITRP Program – Contract instructors staff an established training program, called the Information Technology Resource Providers (ITRP). The program primarily provides training, assistance, and on-the-spot consultation for USPTO staff on in-house and commercially available automated systems and on information resources and services. The ITRP program supports formal programs (new hire training, telework training etc) as well as providing less formalized support and assistance.

SSE Program (a pending initiative) – Contract instructors are expected to staff a new training initiative, the Search Strategy Expert (SSE) program, which the USPTO expects to implement by the time of award. This program will utilize search experts to provide one-on-one assistance to customers (examiners) on

**DOC-52-PAPT-07-01001**  
**Attachment 6**  
**IRIS – Background on Services**

Page 9 of 20

the development, refinement and execution of customers' search strategies to minimize costs and maximize the quality of search output. This support will be provided for all search systems: with an emphasis on assisting all examiners using in-house systems (EAST, WEST), and for those examiners also received training on how to search commercially provided data base services (Dialog, STN).

Other initiatives and training programs will be developed as needed.

Audience - The greatest need is to provide training and assistance to patent examiners, but instructors also provide training and assistance to technical support staff and other staff within the USPTO. Instructors are also involved in providing demonstrations or presentations to dignitaries, visiting foreign patent examiners, other USPTO visitors and groups and have occasionally been tapped to provide demonstrations at conferences and other functions.

Automation Tool Enhancements/Changes - The USPTO has an ongoing process to provide examiners with a growing number of examination-related automation tools to increase the efficiency of the examining process and to encourage uniform examining practice. This reliance on automated systems generates an on-going and increasing need for assistance and instruction.

These tools include an automated system to electronically access patent and trademark applications, in-house tools for searching US and Foreign Patents, tools to allow examiners to generate correspondence on applications, case management tools, a variety of reference materials and internally developed manuals and aids in electronic hyperlinked form, and a standard suite of office automation products (primarily Microsoft-based).

Flexibility – The contractor must be flexible and able to adjust to changing training needs at any time. The need for automation assistance and training can change dramatically throughout any given year affecting the level of effort required, the type of training needed, and dependent on the availability of funding. Examples:

- Due to budget restrictions in one year, the amount of training, and trainers available were cut with only the most critical training issues addressed.
- With the first implementation of electronic access to patent applications, the entire Examiner Corps (thousands of examiners) had to be trained on that system. Almost all other training was put on hold for over a year until all examiners received extensive classroom training on the new system.
- In other years, "catalog" courses were developed to allow examiner to select courses for refresher classes, to keep abreast of software tool enhancements and to learn about new ancillary automation tools.
- In FY2006, catalog courses were no longer offered, due to the great need for training support for new examiners attending Patent Training Academies, the extensive need for telework training for "hotelers", and due to the push for CBT and e-learning courses.

Organizational Structure – Full time contract trainers are under the USPTO's Scientific and Technical Information Center (STIC) and work closely with EIC staffs to provide the most efficient and effective services possible to our customers.

Some training staff are primarily assigned to support specific Technology Centers (TCs) and are adjuncts to the EICs supporting those TCs. These training staff become experts in assisting examiners in a specific technological area. Whenever possible, these training staff are co-located with EIC staff.

Other training staff are assigned to training programs and to support other training needs. Examples include supporting new examiner training programs, training support staff, supporting telework training programs, providing demos (both on-site and virtually) on automation tools, providing assistance to the video lab on development of CBT courses, instituting e-learning methods, and providing training materials

**DOC-52-PAPT-07-01001**  
**Attachment 6**  
**IRIS – Background on Services**

Page 10 of 20

development and distribution assistance as well as training expertise to other USPTO staff involved with training.

USPTO Business Practices - Training on automation tools and information resources goes hand-in-hand with training on the USPTO's business process. Contract instructors gain some understanding of the business process when learning how to train on automation tools and when providing assistance to examiners and USPTO staff. When contract instructors do not have sufficient experience with a business process to incorporate it into training, they work in tandem with Government or other trainers who have that knowledge in order to provide well-rounded and effective training sessions.

Searching – Contract instructors such as ITRPs need to understand their capabilities and limitations concerning search training and assistance. In order to train on in-house search systems (EAST & WEST) ITRP staff are trained on basic search functionality and have the capability to reinforce basic search techniques on those systems when assisting customers. However most ITRPS do not have extensive search experience and are **not** qualified in the following areas:

- Assisting customers with the development and implementation of effective art/technology specific search strategies.
- Identifying appropriate databases and tools for searching.
- Identifying and effectively using commands specific to commercially available databases.
- Using advanced search techniques.
- Evaluating search results.

ITRPS must be trained when to recognize that assistance in the above areas are outside of the scope or their knowledge and experience and that customers needing this type of search assistance should be directed to search experts or search trainers (e.g. SSE staff).

Training Methods: Instructors promote and provide training via numerous methods. In FY2006, those methods included:

- Lecture style training
- Training labs
- Demonstrations
- Presentations
- One-on-one assistance
- CBT's (computer based training)
- E-learning (instructor led) demonstrations

ATOM (Automation Training Online Manager) –This is the current in-house USPTO system used for:

- Scheduling classes
- Student registration for classes
- Generation of class rosters
- Assignment of instructors
- Input of course evaluation results
- Tracking one-on-one assistance provided
- Generating training reports

ITRP Hotline – The current help service is staffed by trainers and is called the ITRP Hotline. This hotline complements both the assistance available via the Virtual EICs (VEICs) and the assistance provided directly to customers by on-site EIC and training staff. The hotline allows any USPTO staff who utilizes “collaboration” tools to connect immediately with an ITRP via audio, video and electronic communication methods.

Electronic Mailboxes – ITRPs currently monitor mailboxes set up for questions on class registration and for feedback on automation tools. Mailboxes currently monitored include

**DOC-52-PAPT-07-01001**  
**Attachment 6**  
**IRIS – Background on Services**

Page 11 of 20

- ATOM Registration Help Mailbox (AutoTrainR)
- PAF (Patent Automation Feedback) mailbox
- IFW Support Mailbox

Train the Trainers - It is acknowledged by the Government that in order to gain the skills and knowledge to provide this extensive training program, time must be allocated to train new hires and update existing staff on changes. However, en-masse training of the entire training staff is rarely feasible. Contract management must develop a reasonable schedule for training that will not hinder provision of instructional services.

- It typically takes up to 4 months to certify new ITRP hires as fully capable trainers on core automation tools (EAST, OACS, EDAN & Teleworking tools).
- It can take up to a year for new ITRP hires to become fully familiar with the entire suite of tools.
- It takes a couple of years for new ITRP trainers to be considered at the expert level.
- SSE trainers must be expert searchers in order to become SSE trainers.

Due to the broad range of skills required for this task order, the Government recognizes that not every instructor will be able to be experts in all areas (search systems, office automation, teleworking, technology expertise etc). However, the Contractor is expected to fully utilize current staff capabilities and to continually strive to increase the knowledge base of each staff member in order to provide a well-rounded and flexible team.

Patent Training Academy (USPTA) support

In 2006 the USPTO extensively revised their training program for new patent examiners and created multiple Patent Training Academies. Six training academies exist on campus as of Nov 2006 and that number may grow to 9 or 10 academies by the end of FY07. Each training academy trains from 100 to 128 patent examiners.

Government staff provide training on the patent business process (policies, procedures and business processes used to examine patent applications). Contract staff provide training primarily on automation tools, and STIC government and contract staff primarily provide training on NPL (non-patent literature) resources.

The current program is an 8 month training program with the first 4 months focused heavily on training and the last 4 months focused on examiners handling their first real patent applications. Additional training and support is also provided within the second half of the academy. Training consists of:

- presentations in lecture halls,
- hands-on-training in 8 labs running simultaneously within a Patent Academy.

Currently, teams of trainers (ITRPS) are assigned to provide full time support and lab support. Labs for the Patent Academies are staggered so that one team can support labs for several academies. If the number of Patent Academies is increased to 9 or 10, additional team(s) of ITRPS to handle labs will be required.

Hoteling training support – Patents staff are currently provided two (2) full weeks of intense training on hoteling tools. Other staff are provided customized training (typically 2 days) as needed on hoteling tools. Currently, teams of ITRPS alternate every bi-week to handle the 2 week classes.

Other time – examiners use codes to reflect how their work time is allocated. “Other time” is the term they use for recording time spent on non-examining activities, including training time. For example - when examiners are required to attend training (mandatory training) by their SPE’s (Supervisory Patent Examiners) or by USPTO management, an approved “other time” code is provided to the instructors. Contract instructors provide this code to the examiners who attend the class.

**IRIS – Background on Services**

Page 12 of 20

Quiet time – USPTO implementation of quiet time impacts the provision of instructional services. For example:

- The push down of changes to examiner workstations, such as software releases (updates or new software) are held until after quiet time ends.
- Training classes and demonstrations for patent examiners are either not scheduled during quiet time or are severely restricted.

List of automation tools – the following chart lists automation tools that the contract training staff helped support in FY06 (e.g. providing one-on-one assistance on using the resource, or involved in providing training, or involved in training material development).

Title or Acronym	Description
1. CDS Desktop 1.2.5	CDS Desktop is used to manage the life cycle of a reclassification project.
2. EAST 2.2	Examiner's Automated Search - uses BRS/Search text search engine to search US patents and PG publications.
3. EDAN 2.1	Electronic Desktop Application Navigator
4. FPAS 3	Foreign Patent Access System
5. MADRAS 1.4.4	An interface for Technical Support Staff for IFW (Image File Wrapper)
6. MPEP 8	Manual of Patent Examining Procedure
7. OACS 1.7.3	Office Action Correspondence Subsystem supports examiner creation of required USPTO application correspondence.
8. PALM Expo and related subsystems (PALM_FOS & PALM_PreExam)	Patent Application Location and Monitoring (PALM), Examination and Post-Examination (EXPO)
9. Patent-In 4.1	System allows patent applicants to generate nucleic and amino acid sequence listings.
10. DeskFlex	Hoteling reservation software.
11. MCS 5100 Collaboration Tools	Multimedia communication system – a suite of communication tools.
12. Remote Desktop Protocol	
13. Score	Supplemental Complex Repository for Examiners - repository for large/complex items received in support of claims on applications.
14. RightFax	Receives a request for a document to be faxed.
15. Classification Insight	Provides easily searchable electronic versions of the Manual of Classification and Classification Definitions.
16. WEST	Web-Based Examiner Search Tool (uses BRS/Search text search engine)
17. ProKon	Unit conversion calculator.
18. USPQ	United States Patent Quarterly
19. Microsoft Word	
20. Microsoft Excel	
21. Microsoft Access	
22. Microsoft Outlook	
23. Adobe Acrobat 7.0 Professional	
24. Second Copy	Software allows user to back-up files
25. SnagIt	Screen capture software

**IRIS – Background on Services**

26. Window XP	
27. eIDS	Electronic Information Disclosure Statement
28. ChemDraw	ChemDraw Ultra (Cambridge Software) that enables applicants, USPTO personnel, and the publication contractor to communicate using standardized representations and names for chemical compounds.
29. Ad-Aware	Antispyware program.
30. PTO Zone	Intranet Portal - a central point for accessing applications, information, and other resources within the USPTO or on the Internet.

**Reports on Training**

A number of training reports are required for this large and complex training function. The bullets below provide information on the types of training reports generated by the contractor. Reports due by the 15<sup>th</sup> calendar day on the following month (or quarterly – as indicated) include:

- A comprehensive report that reflects the number of classes, orientations, demonstrations and other training sessions held each month. Separation of data by training program (examples include training academy or new hire training, PHP, special training projects and training pilots). The number of staff trained (attendance numbers) under each training program. The number of one-on-one assists. The number of hotline assists. The number of issues received and resolved via feedback mechanisms such as mailboxes.
- A more detailed report providing the number of classes provided to specific programs such as the Patent Training Academy, indicating class categories (titles), and number of class hours per category.
- One-on-one and hotline assists sorted by category (specifying the automation tools, the collaboration tools etc) with the number of assists and the total amount of time spent on those assists.
- A monthly updated list of software/automation tools supported by contract trainers, including an indication of the type of support (training provision, materials development, one-on-one assistance), and the primary USPTO organizations or customers receiving the support.
- A quarterly trainer staffing plan to project the staffing level needed to meet training requirements.
- Monthly and quarterly reports by USPTO organization (e.g. Technology Centers) indicating number of training sessions, and attendance by class provided to each organization.
- Monthly or customized reports on special programs or services (e.g. mailbox feedback reports)
- A monthly inventory of course material including the training staff responsible for maintaining the materials and the USPTO technical contact.
- A monthly software release planning report.
- A monthly report of the certification status of each trainer.

The contractor submits the following daily report:

- A daily schedule of staff assignments: instructors for each class, hotline staffing, on-site staffing for assists to organizations (Technology Centers), mailbox monitoring, etc. This report is provided by close of business the day prior to the date scheduled, and when necessary, updated the day of the schedule.

**3. Trademark Law Library**

The Trademark Law Library (TMLL) is the sole information center resource located in the Office of Trademarks. It provides information data and services including training and assistance in the use of literature resources primarily to trademark examining attorneys and trademark staff. It also provides some support to other USPTO organizations on an as-needed basis.

**IRIS – Background on Services**

Page 14 of 20

The Trademark Law Library is led by one Government Monitor (Director, Trademark Law Library). The contractor provides online research, reference desk support and library technical support for this facility.

The primary focus of the Trademark Law Library staff is to provide operation and maintenance of the Trademark Law Library including manual and electronic reference and bibliographic services to all internal USPTO library users. Typically, Librarians search for, identify, locate, and deliver information (primarily in electronic format) requested by Trademark examining attorneys and other USPTO staff in order to facilitate the examination of trademark applications. Librarians in the Trademark Law Library also assist the Government Monitor (Director, Trademark Law Library) to identify and assess resources and to search electronic and other resources (commercial databases, internet, in-house resources, etc.). Additionally, Trademark Law Library staff provide instructional support and one-on-one assistance (on-the-spot consultation) on searches, searching and resources; provide technical support; provide collection management support; assist in outreach and marketing efforts, and provide overall library support services, and facilities operation support as needed. With the approval of the Library Director, staff may need to establish contacts outside of the USPTO to accomplish some of these functions.

Audience: The primary audience consists of the trademark examining attorneys. However, the contractor shall provide instructional support or guidance to all USPTO staff utilizing the products and services of the Trademark Law Library.

Instruction Delivery Methods: Instructional delivery methods range from general orientation to one-on-one training, dependent on the category or experience level of customers. Instructional delivery is provided by a variety of means including one-on-one assistance, classroom training, briefings, demonstrations, presentations, and by electronic learning methods (e.g., informational instruction sheets, videos and other e-learning methods.) For LexisNexis instruction, a Lexis trainer is available by appointment for which only coordination and support is necessary.

Instructional Administrative Support – In conjunction with the Director of the Trademark Law Library, the contractor plans, coordinate, and perform tasks associated with instructional administrative support. This includes logistical support in planning, scheduling, and conducting training; check class room set-up; ensure proper facilities and equipment are available, ensure the set-up or storage of training aids; assist in preparation of class handouts; create and distribute copies of instructional materials in physical and/or electronic formats.

Outreach & Marketing -The Trademark Law Library utilizes outreach and marketing methods to communicate effectively with its' users. For example, orientations are provided to new examiners about TMLL services (and USPTO in general). Demonstrations are provided on how to use resources and materials. Promotional materials are provided, such as flyers and commercial database vendor materials. TMLL invites their patrons to periodic open house events.

**Trademarks Search Support**

Government and contract staff conduct a number of different types of searches to locate resources and to find full text documents.

The following chart provides examples of the types of searches conducted in the Trademark Law Library and the average search time for conducting such searches.

<b>Search Type</b>	<b>Average Search Time/ Turnaround Time Expected</b>	<b>Comments</b>
Surnames	5 to 10 minutes	Complications: compound name results; surnames that may also be first names; language variations.

**IRIS – Background on Services**

Foreign Language	10 to 30 minutes	Complications: phrases; compound terms.
Geographic	5 to 15 minutes	Complications: requests for product information specific to geographic locations.
Plant/Varietal	15 to 30 minutes	Complications: phrases; common words that may appear out of context in plant databases; results that only include botanical/Latin designations rather than common names; marks that apply to an entire group of plants rather than a specific fruit, vegetable, etc.
Internet (product definitions & descriptions)	30 minutes to 2 business days	Complications: product information tends to be more complicated than simple word or phrase searches; same terms used in multiple fields; terms that remain invisible to surface level searching.
Lexis-Nexis	5 minutes to 1 business day	Complications: as above, regarding product information; complexity of Lexis taxonomy.
Dialog	15 minutes to 2 business days	Complications: as above regarding product information and complexity of taxonomy for various databases.
Commercial Catalogs	30 minutes to 2 hours	Complications: results must be reformatted to deliver in electronic form; overlap of subject areas; collection coverage is uneven; necessity to cross-reference print information with web sites.
Dictionaries/ Encyclopedias	Varies, usually short searches	

Commercial Databases

- o The Trademark Law Library focuses primarily on searching the Lexis-Nexis databases and the Internet.
- o ALL Varietal/Plant searches must be performed by Library staff for the examining attorneys using Dialog databases (over 500 databases)
- o There are other commercial and in-house databases and resources also searched by this staff. (See PWS Attachment E)

Searcher Expertise

Searchers must efficiently and cost effectively search commercial databases in order to obtain quality results. In order to search the extensive collections of materials available at and through PTO, searchers need to know more than just the basic mechanics of searching (Boolean logic, proximity operators and nesting).

- Searchers must be able to effectively utilize advanced search functions.
- Searchers must be flexible and be able to use varying search commands that may be unique to specific database vendors. Currently, each vendor has their own search conventions and customizes search commands and functions for their products.
- Searchers must know how to develop complex search strategies.

**DOC-52-PAPT-07-01001**  
**Attachment 6**  
**IRIS – Background on Services**

Page 16 of 20

- Searchers must be able to adjust for the type of results the databases provide (abstracts or full text) and adjust search strategies as the search progresses (based on interim search results) to efficiently and cost effectively mine databases.

It takes a considerable amount of time for searchers to develop into effective and efficient expert searchers. Depending on the technology searched, it can take up to a year for a newly hired searcher to become an independent searcher.

Search Assistance – searchers provide trademark examiners or USPTO staff with support on: identification of appropriate databases and tools for searching reinforcing basic search techniques; use of database specific commands; development of art specific search strategies; use of advanced search techniques; and evaluation of search results.

#### **4. Centralized Services**

The Scientific and Technical Information Center's Centralized Services Division includes the following three service areas supported by the contractor.

- A. Reference Delivery Support
- B. CRF Support
- C. Translations Support

CRF and Translations service support require a low level of contract effort while the Reference Delivery function requires a higher level of contract effort. In order to maximize use of resources, service support staffs are cross-trained to ensure continual support for all three services.

##### **A. Reference Delivery Support**

The Reference Delivery Branch (ILL) consists of a mix of government and contract staff who function as a team to fill requests for non-patent literature (references) for USPTO employees. A government Supervisor and a Team leader, both Librarians, lead the Branch. The Branch staff is currently comprised of both government and contract staff including: Librarians, Library Technicians, Technical Information Specialists, and a contract Database Administrator for the CUADRA STAR database, a UNIX-based system.

ILL staff process thousands of requests for non-patent literature documents and interlibrary loans each month. Requested information ranges widely and includes, but is not limited to, journal articles, books, conference proceedings, dissertations, technical reports, specifications and e-resources. The requests are either filled in-house from STIC resources, or they are out-sourced to a vendor.

Requests are submitted either via email to the **STIC-ILL** and **STIC-ILL Electronic** inboxes, or they are hand-written and picked up from specified locations. Staff closely monitors the inboxes during normal business hours, and after hours when needed. Each request is processed and searched against the holdings of the STIC catalog to determine whether or not it is available in-house. At this time, the contract staff is primarily responsible for filling the in-house requests with some assistance from the government.

Requests that cannot be filled from in-house collections are forwarded to a separate set of staff to obtain them from an outside source. The Branch has several deposit accounts with organizations that provide rapid document delivery, and the government staff also retrieve materials in-person daily from local federal agencies. The government staff is responsible for filling all requests submitted by examiners in the TC1600. Currently, the contract staff is primarily responsible for completing requests submitted by EICs 1700, 2800, 3600, 3700, and any other USPTO customer who is not a member of the examining

**DOC-52-PAPT-07-01001**  
**Attachment 6**  
**IRIS – Background on Services**

Page 17 of 20

corps. Currently, most of the support for EICs 2100 and 2600 is provided by government staff. However, the contract staff provides also back-up support for EIC2100 and EIC2600 requests.

In support of the work-at-home program, the STIC is now filling requests electronically, whenever feasible. The ILL staff uses several methods to accomplish this. Documents are scanned and emailed as PDF documents, sent using RightFax, or posted to a server with a link being emailed to the examiner.

The target turn-around times for completion of requests are 24 hours for documents located in-house within the STIC and 2-5 working days for those supplied through an outside vendor.

The STAR system has a host of databases, two of which are critical to the success of this task:

- *The Journal Database* - During each month ALL flagged records in the STAR system must be correctly identified (using the appropriate resources) and entered into the Journal Database. All records must be completed at the time of the monthly report.
- *The Vendor Database* - This database must be maintained in an on-going fashion. All tracking must be up-to-date on a continuing basis and all invoices must be properly entered, added and accounts reconciled.

## **B. CRF Support**

Background: When a Patent Application is sent to the United States Patent and Trademark Office (USPTO) containing nucleic or amino acid sequences, the applicant is required to provide the sequences on electronic media referred to as the Computer Readable Form (CRF).

The CRF is loaded onto an automated data processing system, by the USPTO. The CRF is processed via proprietary software, to ensure that the sequences comply with Sequence Rules (37 CFR 1.821-1.824) and that they contain no errors, or any known viruses. The CRF is automatically checked for compliance with the Sequence Rules in both format and content. Sequences successfully processed without errors are transferred to the Automated Biotechnology Sequence Search (ABSS) system.

The automated data processing system will post an electronic report called the Raw Sequence Listing (RSL) report for the STIC Biotechnology Systems Branch to review. For each CRF processed the RSL is reviewed and annotations are provided to clarify any problems found. The annotated RSL is then re-posted for further handling and distribution by the automated data processing system.

CRF Support: The CRF staff (government staff and contract staff under this contract) review all posted RSL reports, erred and non-erred, to assure compliance, in both format and content, with the Sequence Rules. The CRF staff annotates errors discovered so that the applicant can be notified of the error and how to fix it. The goal is to complete the review, annotation and reposting process for each RSL within 2 days from the day the RSL reports are posted by the automated data processing system.

## **C. Translations Support**

Background: The Translations Branch supports the mission of the USPTO by providing translations in an accurate and timely manner. The Translations Branch of STIC provides both written and oral translation services to various USPTO staff including examiners, Board of Appeals, Office of International Relations and Trademarks. The majority of the customers are Patent examiners working in Technology Centers and being served by STIC through their EIC and other patent employees.

Translation requests received are initially processed by contract staff, with final processing currently handled by government staff with assignment to in-house staff or outside vendors for translation. Requests are submitted via e-mail, fax or in paper. Requests may be for translation of patents as well as non-patent literature. The translation operation includes on-site government translators and off-site

**DOC-52-PAPT-07-01001**  
**Attachment 6**  
**IRIS – Background on Services**

Page 18 of 20

contract translators (via separate translation contracts) who translate foreign patent documents and other materials.

Translations support: Staff under this contract support the translation operation by regularly checking for translation requests, checking in the translation requests, screening for RUSH requests, verifying request accuracy, retrieving full text foreign patent documents from foreign patent databases, and processing the request (stamping, word estimation, copying etc).

After the initial processing, the requests are turned over to the government's Program Analyst, who completes the screening and processing and then sends the requests to in-house translators or to an off site vendor.

The contractor also provides other related support such as: contacting the requester to verify submitted requests are being processed; investigating and resolving questions or issues about translation requests; and distributing completed translations.

Accurate record keeping and maintaining statistics is critical. Translations are needed by examiners in a timely manner as part of the patent examination process and it is critical that work is completed and up to date on a daily basis.

## **5. Information Access and Management Support**

IAM supports the mission of the PTO by providing accurate and timely access to print and electronic non-patent literature. The majority of the customers are patent examiners working in Technology Centers and being served by STIC through their EIC and other patent employees.

The Information Access and Management Branch (IAM) consists of a mix of government and contract staff who function as a team to purchase and provide access to non-patent literature (references) for USPTO employees. A government Supervisor, a Librarian, leads the Branch.

Contract support for the Branch is comprised of Librarians, Technical Information Specialist(s), Library Technicians, a Web Librarian, Catalogers, and a Program Manager/Database Administrator for an internal database system (TRACKSTAR). The Contractor provides support to the USPTO to locate, order, process, manage, and distribute information resources in physical formats and via electronic means. As needed, the Contractor provides system and process improvement support for all functions under this task order. The contractor may need to establish contacts outside of the USPTO to accomplish some of these functions.

IAM processes and provides access to more than 15,000 electronic journal and books, and purchases more than 3,000 print references and standards for patent examiners each year. The Branch also maintains more 9,000 Web pages including the Electronic Information Center (EIC) Search Template Pages on the USPTO Intranet.

Requests are submitted either via email using the purchase request form, a general email to the Branch Chief, or they are hand-written and forwarded by information center staffs. Each request is processed and searched against the holdings of the STIC catalog to determine whether or not it is available in-house in either print or electronic format.

Requests for non-patent literature consists of serials, conference proceedings, books, standards, databases, videos, CD-ROMs, dissertations, and manuals.

Serial requests are processed yearly with the processes beginning in mid-July. The final list for titles to be renewed or cancelled, and new subscriptions to be purchased, are submitted to our serial aggregator (vendor) by September 30<sup>th</sup> of each year.

**DOC-52-PAPT-07-01001**  
**Attachment 6**  
**IRIS – Background on Services**

Page 19 of 20

In recent years, STIC has sought to purchase materials whenever possible in electronic format. This practice supports STIC's goal to provide virtual access to information for its customers and also addresses increasingly restrictive on-site space constraints. Whenever possible materials, especially serials, are purchased in online-only format.

Access to non-patent literature resources is critical to the mission of STIC and the USPTO. IAM staff provides support to this mission through access to print and electronic materials via the online catalog, which is currently Horizon a product of Sirsi Dynix, the NPL pages and purchase of print materials. Resources are cataloged; links are provided and verified through the online catalog and also through e-resource lists located on the Intranet.

Acquisition of non-patent literature is tracked through an in-house system, TRACKSTAR which was developed and is maintained by contract staff. This is currently an Access (relational database) that provides reports on acquisitions, funding, usage, expenditures and non-patent literature requests at the requestor and EIC level.

The Branch also provides support by helping develop and maintain search template pages, EIC home pages, the STIC home page and alphabetized lists of electronic resources.

Contractor support includes: order processing, reviews of literature resources, processing materials for binding, material processing (books journals etc), mail processing, cataloging (utilizing OCLC), maintaining and updating the OPAC (Online Public Access Catalog, e.g. Horizon), creating, updating and maintaining web pages, updating links, updating and maintaining subject specific databases, collection maintenance, serial processing and maintenance, maintaining TRACKSTAR, researching and evaluating new or alternate information resources, and generation of statistical reports on the collection, on usage and on expenditures.

## **6. Contract Management, Administration and Consulting**

Strong contract management and administration skills are a key requirement for the success of the services required under this contract. Contract managers must be able to work with the government collaboratively and effectively and must train their staff to do the same.

### Collaborative Effort

It is critical that the contractor understands the work environment at the USPTO and the need to work collaboratively with the Government. The Government has managers or team leaders for each Information Center operation. They manage the government staff associated with their information facility. Due to the extensive array of services provided under this contract, and the distribution of contract staff among these numerous facilities, the on-site government managers and team leaders assist the COTR by providing localized, on-the-spot technical direction to contract staff who work with those information centers facilities. Government staff who assist the COTR with on-the-spot technical direction are referred to as GMs (Government Monitors).

Retention of Expertise – There is a strong need for very highly qualified staff under this contract. It takes a long time for new staff to develop into experts who can effectively provide the full range of services required by USPTO.

Excellent examples are the high level of expertise required for the searcher and trainer positions. Even with the recruitment of very experienced staff for these positions, there is still a steep learning curve before new staff can become both effective and efficient. Strong and effective contract management is required to ensure that a high level of expertise is retained in order to meet the needs of the services required under this contract.

## IRIS – Background on Services

Page 20 of 20

Innovation and Proactivity – The services provided under this contract are dynamic in nature. The contractor must not only stay on top of existing services but must also be proactive in helping the Government refine existing services, and identify and implement new services under the scope of this contract.

Consulting – On occasion, outside expertise may be needed, e.g. consulting support, related to information and instructional initiatives, programs or processes.

### **7. Supplies and Materials**

The Government normally provides daily supplies and materials needed by on-site contractor staff. However, there are instances when supplies and materials cannot be obtained in time, or in sufficient quantities, to meet the need. In those cases, the Government will notify the contractor and those items are purchased on a cost reimbursement basis. Recent examples include purchasing large numbers of binders and index guides and tabs needed for training materials.