

Between the 2008 and 2009 Patent Information Users Group (PIUG) annual conferences, I developed the PIUG wiki, including the PIUG Discussion Forum (PIUG-DF), to support PIUG and its membership. This paper describes the status of our electronic communications in 2008, the process of developing the new tools, and the benefits that have accrued to PIUG members and others interested in patent information.

### Where We Were in Electronic Media

In mid-2008, PIUG [http:// www.piug.org] still worked with a balky email-based discussion list and archives; committees and teams generally relied on email for group interactions. Some prototypes for committee interactions were already in place. The board of directors used a minimally functional discussion list on the piug.org hosting site. In previous years, the annual conference sponsorship committee used a wiki to share documents, but its members found the process difficult and failed to take advantage of other wiki functionality.

The growth of PIUG activities suggested that matters were only going to get worse. Several new task forces and other recently formed conference committees were likely to ask for improved communication tools. Some were independently set-

THE PIUG WIKI

## What Is PIUG?

The Patent Information Users Group, Inc. (PIUG) was established in 1988 and became incorporated in 2000 to discuss issues and concerns relevant to the patent searcher community. PIUG remains focused on the importance of intellectual property, especially patent publications and computerized patent databases, to meet our clients' needs. PIUG works with intellectual property database producers and vendors to maintain and improve the quality of their products from the customer or user perspective. Membership has grown to more than 700 active members from 27 countries, including patent information professionals who do patent searching for corporations, law firms, and academic institutions, as well as many independent patent information consultants. PIUG members are employed in performing patentability, freedom to practice, and validity patent searches and patent information analysis as a strategic innovation tool for Fortune 500 and multinational companies, leading universities, and major IP law firms. Others are employed in information companies providing services in support of patent searchers.

To encourage broad membership, PIUG keeps its annual dues modest — \$50, or \$25 for students and the unemployed. We work together via the PIUG electronic media described in this article and three conferences per year: the annual conference in May, the regional Northeast conference in October, and the Boston Biotech meeting in February. PIUG publishes a biannual newsletter that features member articles, search tips, and information on patent database vendor and producer developments.

## For more information on PIUG, check out these sources:

"The Patent Information Users' Group — Twenty Excellent Years: PIUG's Impact on Patent Information," Sara K. Davis, *World Patent Information*, 31(2), June 2009, pp. 140–141.

- PIUG history pages [http://wiki.piug.org/display/PIUG/PIUG+History]
- "Introducing the PIUG Wiki and Discussion Forum," Thomas E. Wolff, *PIUG Newsletter*, March 2009, pp. 7–8.

Wikipedia article on PIUG (pending)

ting up their own wikis. Nothing that currently existed was going to be acceptable. The PIUG Discussion List (PIUG-L) was an administrative headache, and its functional limitations, such as the inability to attach documents, cried out for an alternative. So I began searching for new applications that would satisfy all pending needs. I saw the SLA wiki site [http:// wiki.sla.org] with its vast content and clean interface and recognized that its wiki application could work effectively for PIUG. However, at that point, I did think we would need to keep the discussion forum separate from the wiki.

## What We Developed

The PIUG wiki [http:// wiki.piug.org] was designed to further the PIUG mission "to support, assist, improve and enhance the success of patent information professionals through leadership, education, communication, advocacy and networking." It was announced at the PIUG Northeast Conference in October 2008 and opened for committee and task force use in November of that year. The wiki complements the current PIUG website, which is reserved for generally static official content, membership management, and commercial transactions. The wikibased PIUG-DF officially replaced the PIUG-L on Feb. 1, 2009.

The Confluence application from Atlassian Pty Ltd. [http:// www.atlassian.com] runs the PIUG wiki; it is the same program the SLA wiki uses. PIUG runs Confluence through a generous nonprofit license from Atlassian. The wiki site is hosted by Adaptavist.com Ltd. [http://www.adaptavist.com], which offers many useful plug-ins critical to the success of the wiki. Integration of the discussion forum with the wiki was made possible by the forum macro in the Community Bubbles plug-in as well as the Descendent Notification that sends out email notifications with each new forum topic or comment. Other critical Adaptavist plug-ins include Theme Builder, for wiki interface design, and User Management, to handle user sign-up requests. Other sources provide plug-ins on attachment checkout/check-in and webDAV, an administrative tool for treating Confluence like a network drive with drag-and-drop file operations. Confluence and the plug-ins provide extensive administrative control over user access and operations. Site administrators manage global functionality and designate "space administrators" to manage specific areas of interest.

The PIUG wiki is divided into different "spaces" according to content and target community (team or committee) interest.

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Figure: PIUG Space Home Page - wiki.piug.org

Spaces are accessible from the common Dashboard. Users see links to spaces and content to which they have access rights. The primary space is the PIUG Space shown in the figure below. It has open access that allows anonymous viewing but requires registration for edit rights and access to certain pages and features. The PIUG wiki also contains numerous closed team spaces for the board of directors and various committees and task forces. Space administrators establish membership for their spaces as well as manage content and functionality within their spaces. The PIUG Space and each team space contain at least one discussion forum and numerous content pages, such as knowledge, organizational, and resource pages. Finally, PIUG members may create personal spaces that may be as simple as listing contact information or as complicated and extensive as the user wants. Users may set up multipage personal spaces in lieu of or in addition to professional websites, LinkedIn profiles, Facebook pages, and the like. We see personal spaces as a way to improve networking for PIUG members as well as a means of recruiting new members.

At the simplest level, people may view and search the entire PIUG Space, other than members-only content, without logging in. As a result, almost all PIUG Space content is indexed by search engines and accessible to all on the World Wide Web. However, users must sign up and login to the wiki to take advantage of additional functionality, such as adding pages or attachments, posting discussion forum topics, replying to or commenting on pages, or gaining access to restricted spaces and pages. As of May 2009, the PIUG wiki had more than 760 registrants and more than 140 individual contributors of wiki content. Current PIUG membership is not required for registration on the wiki, but users gain additional access and functionality rights on the wiki by becoming PIUG members.

Most of the potentially dynamic content on the PIUG website was migrated to the PIUG Space with the expectation that community participation would update pages and make them truly dynamic. Patent community members have been adding, updating, and editing content throughout the wiki, including news items and resource and knowledge pages that have replaced the outdated "Knowledge Base" pages on the PIUG website. These pages cover patent meetings, conferences, seminars, training opportunities by vendors, patent organizations and others, and detailed resource pages on all aspects of patents, information specialist activities, and PIUG itself. Usage of the closed team spaces has been growing. The most active teams have been those supporting the 2009 Annual Conference committee and the board of directors.

## **Objectives for the New Electronic Communication Media**

Once the need for improved electronic media was recognized, the following objectives were established. The new PIUG web interface must do the following:

- **1.** Make it easy and inexpensive to install and maintain.
- 2. Make it easy to add and update content.
- 3. Make it easy to navigate and search.
- 4. Make dynamic and members-only web content collaborative.
- 5. Support team collaborations.
- 6. Improve PIUG online discussion.
- 7. Promote community interaction as users see WIIFM ("what's in it for me").

Each of these objectives is discussed below with emphasis on PIUG wiki design and Confluence and plug-in functions to produce successful implementation.

# **Objective 1:** Make It Easy and Inexpensive to Install and Maintain

I chose the Atlassian Confluence and Adaptavist hosting support after initial evaluation and testing of other inexpensive or free wiki and discussion forum applications. No other option appeared to offer the outstanding navigation and functionality evident in the SLA Confluence wiki. The free nonprofit community license offered by Atlassian made Confluence affordable. On the other hand, PIUG could not afford the wiki site management model followed by SLA, which relies on its own dedicated IT personnel and servers to host Confluence and write plug-in applications. In addition, the SLA wiki has many different spaces that seem to be independently designed, implemented, and managed by administrators, some of which display considerable programming skill. Finally, I was concerned that the version of Confluence running the SLA wiki was relatively old, perhaps because its customization had become a barrier to updating the Confluence application.

PIUG needed to do better with less. Adaptavist offered PIUG hosting, initial development, and management services at discounted rates, plus complimentary licenses to all plug-ins in concert with the Confluence nonprofit license. Adaptavist could also provide further development at reasonable cost. I anticipated that the Adaptavist Theme Builder could handle design, consistency, and upkeep of space layouts and functions. Theme Builder is used to configure the overall interface, including user-friendly drop-down menus, the left side navigation panel, and content area function icons. No programming language facility

is required, just a knowledge of Confluence administrator tools and Theme Builder macros, both of which are supported by extensive documentation, developer forums, and customer service. These tools and macros allowed us to develop a clean user interface consistent across all wiki spaces. Available plugins offer tremendous functionality and administrators and developers can write additional plug-ins with Java and Velocity programming language. In addition, Adaptavist maintains Theme Builder and its other plug-ins so they always work with Confluence upgrades.

Administration of the developed wiki is very manageable. Most of my time involves helping participants make the most of their interactions with the wiki and maintaining the user interface, both to implement new ideas and to take advantage of upgraded functionality. The only regular responsibility is approving new sign-up requests. We strengthened the sign-up procedure after some new users posted unwelcome content with no relevance to patent information issues. Administrators use the Adaptavist User Management plug-in to set password strength, require registrants to complete Captcha challengeresponse, validate email addresses, and facilitate administrator approval of new registrants. Anyone who does not use a company email address is contacted for confirmation of a legitimate interest in patent information. We also contact users to advise them of better ways to add and edit content, especially when it seems that they don't use the wiki editor to its full advantage nor create easily readable pages. On occasion, we will move pages to other forums or sections in the hierarchy or otherwise edit content, such as enhancing page titles, to make it more useful. While developing the PIUG wiki, we followed the progress of Adaptavist plug-ins closely since some functionality critical to the PIUG wiki was still under development. Now we wait until upgrades are released for production before implementing them, although we provide feedback as appropriate to Atlassian and Adaptavist for improvements and enhancements that would help our users.

## **Objective 2:** Make It Easy to Add and Update Content

The Confluence application allows users to add and edit content with an editor that has Rich Text, Wiki Markup, and Preview options. The Rich Text editor is generally WYSIWYG ("what you see is what you get") and works adequately although not the same as the Microsoft Rich Text Format. Users may create simple wiki pages using the basic Rich Text editor toolbar that contains icons for formatting text, creating lists and tables, and adding links to wiki and other World Wide Web sites, images, smileys, and custom characters. The real functionality behind wiki pages lies in the wiki markup language into which the Rich Text editor input is translated automatically albeit with errors. For example, links are often broken because the translator may not accurately determine the end of the URL; closed parentheses, punctuation, and even blank spaces (added as html " ") are frequently appended to links. Similarly, when users paste content from other sources, such as Microsoft Word, into the Rich Text editor, the resulting wiki markup code behind the displayed page does not reflect the original content accurately. I recommend users always use the Preview function and then clean up formatting mistakes in the Wiki Markup editor tab. Helpful tips on wiki markup notation are available below the text edit box. However, the current editor version needs to be upgraded to a full-function and flawless Rich Text editor. We expect this will be addressed in future Confluence upgrades.

## Objective 3: Make It Easy to Navigate and Search

The success of the PIUG wiki and PIUG-DF results from both the inherent functionality and the user interface. While Confluence is extremely powerful, the default Confluence user interface is spare. Most of the wikis that I found using Adaptavist Theme Builder buried much of the functionality under dropdown menus in the top menu bar or under user tools in the content area. My top priority was to develop the user interface to



PIUG wiki users and administrators would like to see these improvements implemented:

WIKI EDITOR. At this time, users need to use all three editor functions — Rich Text, Wiki Markup, and Preview — in order to create error-free wiki content. The Rich Text editor tab generates

flawed formatting, particularly when creating links and pasting content from word processors or spreadsheets. Checking the wiki markup code created by the Rich Text editor is the best way to correct errors but should not be necessary except for advanced editing. Because the editor is critical to creating all wiki content, Confluence says it is giving high priority to making the Rich Text editor reliable and truly WYSIWYG.

**CONTROL OF EMAIL NOTIFICATIONS.** Confluence sends out email alerting notifications almost every time content is added, edited, moved, deleted, or renamed. Users and administrators should have more discretion over when such email is sent. The current design only allows control of email notifications when users edit pages, but not at other times, such as when comments are edited, attachments are uploaded, or pages are moved or deleted. Even the method of email control for edited pages is not well-designed, because it requires the user to check a hard-to-notice "Minor change?" box to keep email notifications from being sent. This option box and the current Save button should be replaced by a pair of Save and Notify and Save Without Notification buttons. Similar save/notification buttons should be available when users edit, edit news items, and add attachments and when administrators edit,

move, or remove content including attachments. Additionally, administrators should be able to modify system defaults for the sending of email notifications.

#### IDENTIFICATION OF CONTENT AUTHOR IN EMAIL NOTIFICATIONS.

Users continue to ask for identification of the author of page content or comments in the email message subject line, as occurred in PIUG-L. Currently, administrators have no control over the content of the message subject line. The subject is often too long because it includes the space name, sometimes the discussion forum name, and the full page title. We would like optional title truncation as well as eliminating hierarchical information from the subject line except the space name.

**ATTACHMENT CHECKOUT/CHECK-IN PLUG-IN.** This plug-in works well except that users have to check-in documents with the exact same file name as the checked-out document. That shouldn't be necessary. Users like to edit file names with dates and initials and should be able to do so at check-in. Currently this takes two steps: check in the document with the same file name and then rename the file.

**CHANGING USERNAMES.** Users may change many of their profile details, such as full name and email address, but neither users nor administrators have a simple means to change usernames. In addition, once a user has added content, administrators may not delete the username from the wiki in order to substitute another one. We would like Confluence to include a simple menu for modifying a username.

make all functionality and navigation as obvious to the user as possible. Adaptavist Theme Builder facilitates page layout customization and controls page displays based on login status, user access rights, and page or content type. Adaptavist staff was extremely helpful with the early design work.

I wanted to make every important operational function visible when appropriate. The configuration of the PIUG Space homepage shows the principal page sections. The default top menu bar contains home, view, edit, and login/logout functions with Theme Builder. It has been enhanced with new drop-down menu items to cover user settings, links to help pages, links to the PIUG website, and administrative functions for space and site administrators, as well as links for users to sign up for the wiki or to join PIUG. The membership links are controlled by Theme Builder "hide" and "show" macros and display only when appropriate. Confluence contains so many useful, but otherwise obscure, user settings that I added five menu items under "Settings" to cover personal information management, email notifications, personal space, community memberships, and personal wiki data.

The left side panel is set up to help users add content and navigate through the wiki. It contains direct links to PIUG-DF, upcoming PIUG conferences, and user-designated favorites, as well as a hierarchical navigation tree linking to all wiki pages. Most page functions appear as a set of icons in the upper right of the content area: edit page; send to printer; export to Microsoft Word or Adobe PDF documents; view page information or attachments; set favorites; and set and manage page and forum watch notifications.

Confluence has strong search and navigation functions. Search boxes are available to cover the whole wiki or individual discussion forums. The advanced search function can limit searches to specific spaces or other criteria. Several features facilitate navigation. The so-called "breadcrumbs" appear just below the top menu bar and clearly show where the current page is located in the site hierarchy, providing easy links back to parent pages for the current page. The expandable navigation hierarchy display in the left side panel enables direct navigation among pages and forums. Users may create favorite pages, favorite spaces, and favorite people for listing in the left side panel. The main wiki Dashboard allows navigation to all spaces to which the user has access, as well as to favorite pages and recently updated content.

I designed the PIUG Space homepage using only the wiki editor. I intended it as a model for content and formatting usable on other pages within the PIUG Space, team spaces, and personal spaces. The top portion is a two-column table containing a table of contents and a PIUG news calendar in the first row. Below that in the left column appear descriptions of PIUG-DF and other forums in the PIUG Space, links to PIUG committees and teams, and important information on use of the PIUG name and logo. The rest of the right column contains excerpts of the six most recent or "sticky" forum topics from the PIUG-DF. PIUG business matters complete the page. With all the functionality and content on the PIUG Space homepage, users should be able to find content on the PIUG wiki readily.

## **Objective 4:** Make Dynamic and Members-Only Web Content Collaborative

We now distinguish between PIUG wiki and PIUG website content as follows: The former contains content that benefits from community participation and wiki-specific functionality and the latter has all the rest. Most website pages change infrequently, would not be amenable to broad contribution, or use functionality not easily implemented on the wiki. The website provides a platform for membership sign-up; a member directory; commerce requiring financial transactions; official business pages such as officers, by-laws, and policies; vendor listings mediated by the webmaster; archival members-only content such as survey results and newsletters; and PIUG conference informational pages that require gatekeepers and website formatting.

By contrast, the PIUG wiki now contains patent information content moved, updated, and expanded from the PIUG website. The so-called Knowledge Base pages on the website form the core of the wiki's knowledge and patent resources pages. New pages in these subject areas have already been added by wiki participants. The non-PIUG meetings page has moved to the wiki and has been updated extensively by wiki registrants. New pages for specific conferences have been created by users to provide more extensive information. Users may now contribute links and information about individual and ongoing training opportunities offered by vendors, patent offices, and other organizations. Many PIUG history pages have moved to the wiki and invite user contributions. The Newsletter committee plans on moving all information about contributing to the PIUG newsletter, as well as new and archival issues of the newsletter, to the wiki.

The members-only content on the wiki is intended to draw members to the wiki, have them participate in PIUG membership continued on page 51

### The PIUG Wiki continued from page 17

matters, and take advantage of wiki functionality. The access restriction function on the wiki is easy to invoke. Management of access rights to the members-only resources pages will be automated soon by a new plug-in that will interact with the membership database on the web server. Most of the members-only content was moved as is from the website. New content has been created on the wiki that might not have been presented as well on the website. Members may comment directly on new PIUG bylaws proposals before they are voted upon by the membership. The easy-editing nature of the wiki enabled one member to compose his report on the recent PIUG salary survey directly on wiki pages. Another member suggested embedding conference slides on the wiki rather than posting links to the slides as done previously. I posted slides for all the recent PIUG conferences on members-only pages using the "viewfile" macro that supports Adobe PDF and Microsoft Office documents.

## **Objective 5:** Support Team Collaborations

The PIUG Space is accompanied by a dozen board, committee, task force, and working group spaces, used in varying degrees so far. The team that used its space most actively was the 2009 annual conference committee. Previous annual conference committees used simple wikis primarily for document sharing and even fell foul of complicated rules established to keep users from overwriting other users' versions of shared documents. The PIUG wiki uses a well-received document management plug-in that enables checkout/check-in methods for attachments. Ten members of the 2009 annual conference committee created and posted content on 54 pages in their space. More than 120 documents were attached within the annual conference space and were updated at least once on average. The 2009 annual conference committee also used their discussion forum for a significant amount of communication by posting nearly 2 dozen topics. Most of the other teams are expanding use of their wiki spaces.

All PIUG board members have contributed to the wiki space, but use of the wiki space and its discussion forum has been limited. One factor has been the need to include nonboard members in electronic conversations. The PIUG board cannot simply add rights to their wiki space as other committees can. Therefore, sending email messages to all relevant collaborators, board members or not, is convenient and better supported by the old PIUG website-based discussion list. Of course, by using email, the board loses all the thread and archival aspects of the wiki-based discussion forum, as well as easy linking to documents stored in the wiki space.

Team leaders have generally taken on space administration roles. The consistency of space layouts has allowed space administrators to limit their activity to managing space content and team membership. The latter relies on the Adaptavist Community Bubbles plug-in that facilitates managing community (team) membership and tracking who is watching the team space.

I chose to have the Electronic Communications Committee (ECC) carry out its business in an open discussion forum on the PIUG Space. We want to keep the PIUG community updated on our activities and encourage feedback and participation, particularly since membership of the ECC is fluid. The open discussion forum offers all the page content and functionality options that nonforum pages in a separate space would. The PIUG Space includes some additional open forums. The board and others may interact with the PIUG community on PIUG business via the Ask PIUG Leadership discussion forum. Space administrators share tips and issues in the Wiki Administration discussion forum, although site administrators also use a closed space to deal with technical Confluence matters.

## **Objective 6:** Improve PIUG Online Discussion

Some participants in the PIUG-L were concerned about losing the simplicity of email and having to learn a new application. They did not realize that the wiki-based PIUG-DF would mirror most of the email notification functionality of the old PIUG-L while having many advantages over it. Once users have set up their wiki accounts to receive email notifications for new or edited wiki pages, they receive formatted messages with full content except images and attachments. These messages can link to the full wiki page online, open a box online to reply or comment, and view changes if the notification is about an edited page. Replying online after logging in is almost as easy as hitting the reply button on an email message. PIUG-DF users can make comments while viewing the whole conversational thread without needing to search through their email for earlier messages, as they would have with PIUG-L.

As a result of the Adaptavist Forum macro, the PIUG-DF homepage is easy to browse with its tabular format. Each entry has the original topic title and author, an excerpt of the most recent posting (original or reply) with its author's name, and the number of replies. In addition, it indicates the presence of attachments, whether it qualifies as a "hot topic" based on parameters defined by the administrator, and a "sticky" topic pushpin for topics set up by administrators to stay at the top of the table. Users may add new topics or comments via the "Add Topic" and "Post Reply" links in the upper right corner of forum pages. The content of the PIUG-DF is searchable via the specific search box on the PIUG-DF homepage, and this functionality may be added to other forums as they grow. We recently decided to organize related topics into subforums to improve navigation. The first one covers forum topics from the recent PIUG 2009 Annual Conference. Only the top page of the subforum appears as a topic in the PIUG-DF table, but all subforum topics may be retrieved by the PIUG-DF search box.

The key to notifying users of new content is the Confluence "watch" functionality, augmented by the Descendant Notification plug-in. Confluence gives users the option of being notified by email of changes in a whole space or for individual pages. Users may watch a whole forum or child pages under any selected page by taking advantage of the Descendent Notification plug-in that automatically sets a "watch" on all pages, including future pages, under the top page. We call this "watching a forum" and provide a "Watch this Forum" item in the top menu bar. When users are not watching the whole space, each page also has a "Watch Page Family" icon at the upper right. Users can manage all these watches from the "Settings ... Watch My Email Notifications" link in the top menu bar. The individual page watch also allows the user to toggle watching individual pages. In other words, users may stop watching a specific page even when they do receive email notifications for all changed content in a whole space, forum, or page hierarchy.

## **Objective 7:** Promote Community Interaction as Users See WIIFM ("What's in It for Me")

We needed a system that people would use because each recognized "What's in it for me" (WIIFM). At best, it would build on the high degree of participation in the now defunct PIUG Discussion List (PIUG-L) to which users sent 1,000 email messages annually. I thought that even greater participation could be achieved by an alternative medium that allowed attachments, clear discussion threads, archive searching, and the like. Early data suggests that the same WIIFM support is applicable to the wiki and PIUG-DF.

The total number of new postings and comments on the PIUG-DF is approaching the annual number for PIUG-L. Since

the first of the year, more than 260 contributions have been made to the forum, even though users still chose to send 46 messages by PIUG-L in January. There have been about 1.2 replies (comments) per new PIUG-DF topic on average, which compares favorably with 1.1 replies per posting on PIUG-L in 2008. However, a numeric comparison between PIUG-L messages and PIUG-DF postings undercounts the contributions on the wiki. First, the total count of contributions in the PIUG-DF does not correspond directly to the number of alerting email messages sent as a result of users making substantial changes to existing PIUG-DF topics. Particularly for annual conference matters, users edited existing PIUG-DF topics with updated information rather than creating new and mostly duplicative topics. The edited content resulted in the sending of alerting email messages just as adding new pages would have. Second, not all messages sent via PIUG-L are appropriate for the PIUG-DF. Some content is better suited as news items or resource (nonforum) pages or as postings on other forums covering job postings, situations wanted, and questions to PIUG leadership or the Electronic Communications Committee. We anticipate content growth throughout the PIUG wiki to increase as PIUG wiki registration grows.

I believe that the topics now discussed in PIUG-DF are comparable to those previously shared on PIUG-L. Users discuss matters relating to how to do their jobs, including finding, understanding, obtaining, and valuing patents. The following list of PIUG-DF "hot" topics, i.e., those with active give-and-take, reveals the breadth of matters discussed in early 2009:

- 2009 U.S. Patent Reform Act
- ACS Committee on Chemical Abstracts Service
- Best tools for patent searchers on Patently-O
- Confusion with [a specific] patent family
- Consideration of replacing the PIUG Discussion List with the Wiki Discussion Forum
- Do any PIUG members use Twitter?
- Esp@cenet [slow loading] issues?
- Free and open sources of chemical information
- Gene sequence [claimed by name in a patent]
- Improving the Patent Disclosure Document?
- IP asset value [calculation]
- Legal databases [covering litigation suits]
- MPatent 9.1 new citation links graphical interface.
- New searchers group name
- NPL [non-patent literature] prior art search?
- Obtaining an EP opposition decision
- Patent alerts via RSS feed

- Russian patent question [about locating specific A and C documents],
- Swine flu affecting PIUG conference attendance?

Another measure of user acceptance is the rapid growth of user registration on the wiki, currently approaching 800. This is 10% more than current PIUG membership because we welcome nonmember participation. We have hundreds of potential PIUG members signed up for the wiki and about as many PIUG members yet to register. Of course, they can view the wiki and manually review updated content from the Dashboard without registering. We see the wiki as a terrific membership building and retention opportunity. For example, over half of the people who participated in PUIG-L in 2008 have registered for the wiki. In addition, as of mid-May, more than 80 people have posted in the PIUG Space, including PIUG-DF, and an additional 50 have posted in other wiki spaces.

Users are maintaining resource and knowledge wiki pages and creating new ones. Among the most frequently updated patent resource pages are "Patent Meetings, Conferences, and Seminars" and "Patent Blogs & Feeds." A new "knowledge" set of pages were contributed on "Towards a World Patent." I believe we need to find champions for resource pages to enhance their value and keep them up-to-date.

A significant area for improvement is the social networking aspect of the wiki. An interesting case can be made by considering LinkedIn. PIUG offers a PIUG LinkedIn group that requires current PIUG membership. (The discussion forum function in the PIUG LinkedIn group is not activated to avoid competing with PIUG-DF.) More than half of the current PIUG members have profiles on LinkedIn and have joined the PIUG group. By comparison, only a couple dozen wiki registrants have set up wiki personal spaces, and nearly half of those spaces contain little useful information. We hope to encourage PIUG membership both via the LinkedIn group and by requiring PIUG membership for users to create personal spaces on the PIUG wiki. We encourage people to post photos on the PIUG wiki to enhance personal connections between members. This may take time as fewer PIUG members seem to post their photos on LinkedIn than LinkedIn participants in general.

## Conclusion

The PIUG board of directors and members have been very supportive of all wiki development and have shown their acceptance by active participation in the wiki and PIUG-DF. I anticipate that wiki registration will grow to the same levels as PIUG-L and in a much shorter time, possibly within just 1 year. Similarly, annual participation on the wiki should quickly approach that of a typical year for PIUG-L.

The wiki is increasing the global exposure of PIUG and bringing in many potential new members. The consolidation of PIUG-DF and former PIUG website content has created a single website that web searchers can find via Google and other web indexing services that index all the open content of the PIUG Space. I believe this is a significant factor in wiki sign-up by many people previously unaffiliated with PIUG, and each week some of these people join PIUG. At least one person at the PIUG 2009 Annual Conference said that he decided to attend the conference based on the information he saw on the PIUG wiki. We will continue to use the wiki to increase overall participation and global membership. This should include promoting the PIUG as a social networking site.

I hope that the administrative load will decrease substantially as users develop increased facility with the wiki. On the other hand, we will have plenty of opportunity to help new and existing users. While using the wiki is relatively easy, we have provided many "help" pages and recorded tutorials to get people over initial resistance and to provide guidance on creating pages with optimum readability. However, we recognize that users of computer applications frequently do not read the "manual." Administrators will still continue to send personal help messages to users. We also plan to help committees and teams make better use of their team spaces and consequently the PIUG Space. Through our efforts, we plan to make the PIUG wiki and PIUG-DF the primary communication and collaboration media for our community for years to come.

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