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# The Patent Information Users Group – Collaborating via the PIUG wiki and discussion forums

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#### ABSTRACT

The Patent Information Users Group, Inc. (PIUG®) changed its principal way of facilitating interaction among its member and other interested individuals at the end of 2008. A wiki was created to promote sharing of information and collaboration. The PIUG space home page that users see initially and most of the wiki content is accessible to all, as is the discussion forum (PIUG-DF), which replaced the PIUG discussion list. The wiki has consistent design and functionality throughout, allowing simple participation through page creation and commenting by members of the global patent information community.

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#### 1. Introduction

The Patent Information Users Group, Inc. (PIUG®) has been helping improve the way patent information professionals do their jobs for 21 years [1]. PIUG has over 700 individual members from nearly 30 countries worldwide. PIUG members are patent information researchers, patent information vendors, patent information and documentation experts, patent attorneys, and patent agents. They work for technical organizations, universities, non-profit organizations, patent offices, information providers, consulting firms, and law firms. PIUG organizes three conferences throughout the year: the Annual Conference in May, the Northeast Conference in October, and the Boston Biotech Meeting in February.

Through 2008, much of the interaction among members and non-members interested in patent information was via the PIUG discussion list (PIUG-L) and the PIUG web site (www.piug.org). PIUG-L provided simple give and take via e-mail but lacked the conveniences of threaded conversations, attachments, and searchable archives. The PIUG web site supported the community with information about the organization, a knowledge base of useful resources, and a members-only section with membership information, member benefits and conference proceedings. However, much of the web site content became outdated because it relied on limited number of PIUG volunteers and was not open to contribution by the broader community.

The PIUG electronic media were realigned at the end of 2008 [2,3]. The new PIUG wiki (wiki.piug.org) and associated discussion forums, including the main PIUG discussion forum (PIUG-DF), replaced PIUG-L and much of the non-organizational content in the PIUG web site. The PIUG wiki is itself a web site that uses wiki software (Confluence from Atlassian Pty Ltd.) to facilitate easy creation

and editing of interrelated pages by multiple users in a collaborative manner. Patent information professionals collaborate using the main PIUG space on the PIUG wiki. In addition, PIUG committees and teams may use private wiki spaces to carry out business and share documents much more effectively than they had in the past using e-mail or some free wiki sites. This paper describes the organization of the PIUG wiki and how it has replaced and surpassed the previous media. Detailed information on the development goals and resulting functionality and usage of the PIUG wiki are described elsewhere [4].

## 2. The PIUG wiki

The PIUG wiki brings knowledge and community sharing to one integrated web site open to contribution by all interested professionals. The first page that users are brought to by default is the main PIUG space (see Fig. 1). This space may be viewed by anonymous access, i.e., without registering and login, and except for the members-only and a limited amount of other restricted content, is indexed by search engines. Once users login, they may create, edit and comment on wiki pages and carry out most other user wiki functions. A few features, such as maintaining personal spaces or attaching documents, are limited to current PIUG members. The PIUG space is complemented by over a dozen closed committee or team spaces whose access is controlled by their team leaders and whose structure and content is based on team needs.

The PIUG space contains the PIUG-DF, the perceived successor to PIUG-L, and five other discussion forums: two jobs forums for employment opportunities and for situations wanted, a forum for communicating with PIUG leadership, and forums for interacting with and among two wiki related groups—Electronic Communication Committee members and wiki administrators. In the past, users might have sent messages covering these matters to

E-mail address: tom@wolffinfo.com

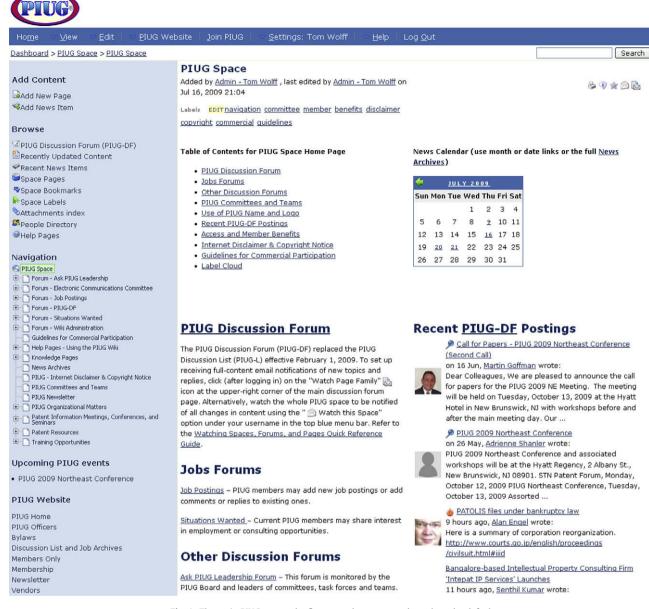


Fig. 1. The main PIUG space: the first page that users are brought to by default.

PIUG-L. Other topics may also be posted as "news items" rather than discussion forum postings, particularly if the intent is to notify rather than generate conversation, although users may also comment on news items.

The information sharing pages generally correspond to the dynamic or the non-official organizational pages formerly hosted on the PIUG web site. The PIUG space has high level pages, i.e., section heading pages, called: knowledge pages; patent information meetings, conferences and seminars; patent resources; and training opportunities. Knowledge pages cover topics such as other associations, "towards a world patent", how to become a patent information professional, and using Twitter. The conferences page and several of the patent resources listing pages are being updated frequently by users. There are also sections covering PIUG organizational matters and PIUG members-only content: conference proceedings, newsletters, salary survey results, and special offers to members. The PIUG web site remains a vital resource both to members and non-members, with official information about the

organization and its three annual conferences, membership listing and some members-only content more appropriate to the web site format.

#### 3. The PIUG discussion forum

The PIUG-DF is designed to work as well as the PIUG-L while improving on old e-mail based technology. The common feature between the two is that wiki users can get full-content e-mail messages of all new postings and comments in PIUG-DF as they did for PIUG-L. To arrange this, users must activate a "watch" on the discussion forum or on the whole space that contains it. Posting a reply to a PIUG-DF topic is almost as easy as sending a reply e-mail message. Users simply click on the "Reply to This" link in the received e-mail message and go directly to the forum topic page. Users can then see the whole topic thread and post a reply after logging in to the wiki. Alerting e-mail messages also have "View Changes" links back to the source page when appropriate.

The main forum page lists 15 topics in tabular format in chronological order. Administrators may designate important topics as "sticky" to keep them at the top of the table. Access to older topics, i.e. the "archives", is available by browsing through the forum pages or using the search function, a significant improvement to searching separate PIUG-L archives hosted on www.questel.com.

Participation in PIUG-DF has increased steadily during the first six months of the wiki as users became more familiar with it. To date about 10% of PIUG registrants have posted on PIUG-DF and the posting rate is accelerating. The annualized total of PIUG-DF postings is still about 20% below recent PIUG-L levels. This shortfall might not be significant since some information that would have been posted on PIUG-L, then the only option, is now published in other forums elsewhere in the PIUG space or as news items. The ratio of replies to original topics is nearly 1.4:1 in PIUG-DF, considerably higher than the near 1:1 in PIUG-L over the past two years. Particularly since the second half of June, 2009, people are responding so much that the wiki algorithm is designating many subjects as "hot topics". During a two-week period, there were nine "hot topics" with over 50 comments covering search questions (searching patents by examiner and art unit, dealing with US applications without assignee names), post-processing issues (building an internal patent and technical literature database, post-processing sequence searches, exporting individual claims into separate spreadsheet columns), obtaining patent documents (retrieving Indian patents), professional matters (patent searcher liability insurance), conferences (call for papers for PaIR'09), and networking issues (using Twitter). Other topics during that period included vendor content expansion, vendor newsletters, PIUG leadership, USPTO leadership, USPTO web site beta testing, and translating documents from Japanese to Spanish.

### 4. Unified wiki design and functionality

Single page design and functionality is a guiding principle for the wiki, even as it covers legacy functions for discussion, knowledge sharing, document sharing, and community development. The mantra of wiki training is "a page is a page". Once a user is comfortable working with one wiki page, he can work with any wiki page. All pages are added, edited and accessed in the essentially the same manner. The primary difference between pages besides their content is where they are in the wiki hierarchy. A new page is placed in the hierarchy by default as a child of the page from which it was created. It does not matter if a user invokes the "Add New Page" link in the left-side panel or the "Add Topic" link in the upper-right corner of a discussion forum. Similarly, one can comment on any page by using either the "Add Comment" link on any page or the "Post Reply" that appears additionally on a discussion forum page. Any page can be moved easily in the hierarchy, both into and out of a forum. In fact, the only thing that distinguishes a forum page from other pages is the imbedded "forum" macro that adds the links just referred to and that tabulates children pages in chronological order according to the original posting date or most recent comment date.

All pages may be edited by the original author or other contributors and can have comments or replies added. The collaborative nature of the wiki comes out especially when users edit each other's knowledge, resources and meetings pages. These pages are usually written in the third person and should clearly have group rather than personal ownership. By contrast, discussion forum topics are usually written in the first person and polite convention keeps people from editing other's pages, in order to ascribe inappropriately new content to the original author. On rare occasion, pages are restricted by administrators or original authors. The main PIUG space page is the most obvious example.

The overlap of discussion forum and other pages may be illustrated by two examples. A recent item intended for PIUG-DF was inadvertently posted under the main PIUG space page. Within minutes and before an administrator could move it to PIUG-DF, two people had already commented. They most likely had "watches" on the whole PIUG space and received full-content alerting e-mails messages. Users who watched the PIUG-DF specifically received such e-mail when the page was moved to PIUG-DF. Users should watch the PIUG space and not just PIUG-DF because useful information is just as likely to be posted outside the discussion forum as inside it. If users consider that they are getting too many such messages, they may revert to watching just PIUG-DF or they may "unwatch" forums or pages that are not of interest.

The second example is the high interest in Twitter that has shown up in two long conversational threads in PIUG-DF. In addition, specific information on using Twitter for PIUG content and on useful Twitter applications is provided in the knowledge pages section. Some of the information from the forum topics was used to create a consistent, value-added page for future reference. Users are encouraged to convert forum hot topics to other reference pages.

Page type and location in the hierarchy are totally irrelevant for those users who rely on wiki search as an adjunct to browsing. Each wiki page contains a search box for the whole wiki, and the results page provides an advanced search function for further refinement. Each main forum page also has a forum-specific search box. Search boxes take text terms without any operators and are reasonably effective at locating target content anywhere in the wiki. Users do not even need to use the wiki search function since all open wiki content may be found using internet search engines.

#### 5. Getting started

Users who want to participate beyond simple browsing and to keep notified of new wiki content and PIUG-DF postings should follow the links in the blue top menu bar: Sign up, Log in, Join PIUG, and Help. Sign up is simple process involving e-mail validation and approval by the wikimaster. Log in is necessary to carry out all functions other than browse and search. While most information and functionality is available to users who are not PIUG members, the Join PIUG link provides direct access to the PIUG membership page, which in conjunction with the PIUG space home page describes PIUG member benefits. The Help pages provide many quick reference guides and Help resources and forums. New users may particularly want to read the quick reference guides on "Initial Sign up", "Adding Topics to Discussion Forums", "Editing Page Content", "Creating and Watching News Items" and "Watching Spaces, Forums, and Pages". The last guide describes all aspects of managing e-mail notifications. New users receive a daily update e-mail message summarizing new PIUG wiki and discussion forum content by default. Additionally, users are encouraged to activate the "Watch this Space" link under the Settings menu bar item while viewing the PIUG space after login. The resulting full-content e-mail messages would cover all new and edited content in the PIUG space, including PIUG-DF and other discussion forum topics, news items, and all wiki pages. The Help resources include a 4.5-min microtutorial on "Joining the PIUG Discussion Forum" and three minitutorials (1 h total) that describe and demonstrate all basic wiki operations and functions.

# 6. Concluding remarks

Acceptance of the PIUG wiki and discussion forums has been outstanding. Registration exceeded 800 at mid-year (2009) and has been growing at about 40 per month recently. The split be-

tween PIUG members and non-member registrants is about even. Since anyone can view most of the content anonymously, many PIUG members and others who have not yet signed up for the wiki are probably just browsing the wiki or viewing the Dashboard or "Recently Updated Content" page to keep themselves informed. However, the goal is to have all PIUG members registered to be sure the wiki is fully effective for communicating with them, at least via "daily updates" e-mail messages and preferably via full-content e-mail messages for those who watch the PIUG space or the PIUG-DF.

At mid-year, nearly 20% of wiki registrants have posted somewhere within the PIUG wiki including the PIUG and team spaces. This number is steadily increasing and is about half the number of users who posted messages on PIUG-L in 2008. While the integrated wiki site enables users to post all kinds of content throughout the wiki, most have not yet started to contribute to knowledge and resource pages or set up their own personal spaces even after posting within PIUG-DF or team spaces. A current objective is to expand the breadth of user contributions and use of the wiki for networking. We encourage users to create personal spaces, not just personal profiles, as well as upload photos as a means to building

connections with the PIUG community and to promote professional credentials.

Participants in the PIUG wiki and in discussion forums come from around the world. They cover the broad range of patent information jobs and employers. They use all wiki functions to collaborate and improve how we do what we do. As was the case for PIUG-L, many participants in the wiki and PIUG-DF have not yet joined PIUG. The wiki presents a new opportunity for growing PIUG membership and expanding PIUG as "The International Society for Patent Information".

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