

Intelligent Mobile Platform for Patent Consulting Service

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Abstract: Intelligent patent consulting service platform is an integrated service platform based on Android and IOS operating system. It can achieve the customized service at the mobile end and can provide intelligent search service, intelligent service delivery, interactive learning and collaborative consulting and other multi-dimensional services, to meet the needs of a large number of users. This paper provides a mobile platform for the applicant side of the functional modules of the design.

Keywords: Intelligent; Consulting; Patent; Mobile; Service

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1. Introduction

With the continuous improvements of people's awareness on intellectual property protection, patent applications continue to refresh the record, a large number of patent applicants need to obtain timely and convenient patent advisory services. The existing patent advisory service model mainly has-includes the patent office accepting hall for face-to-face consultation, customer service center for telephone consultation, the State Intellectual Property Office website for online consultation, and even more traditional letter consultation. These patent advisory service models have a certain limit in time, space and other aspects, can not meet the timely, convenient, personalized and multi-dimensional needs of modern information society. Intelligent patent advisory service platform is an integrated service platform built on the Android and IOS operating system, can achieve the customized patent advisory services of the mobile end, and can provide intelligent retrieval services, intelligent service push, interactive learning and cooperation consulting and other multi-dimensional service modes to meet

the needs of a large number of users.

2. Features of Intelligent Mobile Platform for Patent Consulting Service

In view of the actual work of patent advisory service, the platform combines with the current "Internet +", "intelligent" and the new needs of intellectual property business, puts forward the software functional requirements of intelligent patent advisory services mobile platform, and designs software solution of client end of the Android and IOS operating system and guide subsequent development and application, take into account the behavior analysis of large data technology platform for user service to make relevant project designs. In general, the intelligent patent advisory services mobile platform has the following three main features:

No.1: Having achieved transformation from single voice service to flexible service model relying on mobile Internet voice, text, online and offline functions;

No.2: Offer more intelligent and more convenient patent advisory service to customers through network, thus

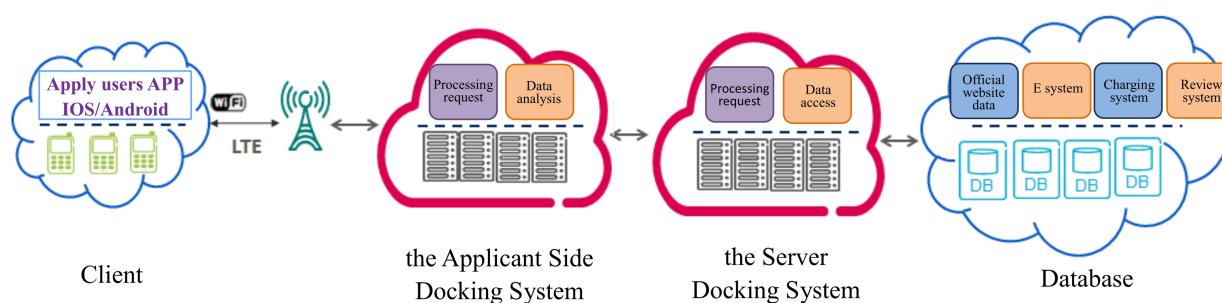


Figure 1. System block diagram

improving patent advisory service ability;

No.3: Based on patent demands from different users, the platform can also push the relevant patent process and prescribed information in time for users and provide users with timely patent help.

3. System Design

According to the system requirements, the system is based on Client / Server, the system mainly consists of server side and applicant side. The server listens and responds to the applicant's request, then submits the database operation request to the back-end database, and returns the processed data to the applicant. The applicant receives the user operation and submits the response service request to the server, then processes the server response information and presents it to the user. The block diagram of the system is shown in Figure 1.

4. System Function Settings

The system includes the server end and the applicant end. This article is mainly about the design requirements of functional modules of applicant end. Applicant end is mainly to realize consulting service function. The main function modules are as follows: Homepage, Patent Search, Patent Search, Manual Consultation, Patent Fee and Private Customization Module (expansion module: patent analysis, patent translation, patent evaluation, etc.). The system functions are shown in Figure 2.

4.1 Patent Query Module

Patent query module functional design requirements: the user can query the patent status, and the patent number (by inputting the patent number or application number). It can be divided into public inquiries and electronic application user inquiries. Interface design requirements: direct input of the patent number or application number, concise and clear interface designs, enter the patent query page, display the patent information. Set query memory function, set the

[query] button, next time you can directly query the patent information checked previously, more convenient for users.

4.2 Patent Search Module

Patent search module Functional design requirements: to provide users with patent search services, can retrieve patent data of China and the United States, Japan, South Korea and Europe and the European Commission and the World Intellectual Property Organization. Interface design requirements: The search function includes the basic retrieval module and the advanced retrieval module. In the basic retrieval module, the user enters the retrieval mode of the keyword, and the system gives the result of the intelligent judgment. Advanced search uses the form search function, the entrance includes the name of the patent, the applicant name, the inventor name, application number, application date, international classification number, public number, public day, bulletin board, announcement date, priority date, priority number. It supports multi-entry logical operation, and supports the user for secondary retrieval. It can choose the country, support Chinese and English input.

4.3 Artificial Consultation Module

The artificial consultation module mainly includes online text consultation, voice consultation, telephone consultation and appointment video consultation, expert consultation and other sub-modules. In terms of online text consultation, the applicant uses the online text consultation module to complete the communication function with the counselor online text consultation; regarding voice consultation, the applicant uses the voice counseling module to complete the communication function with the counselor online telephone consultation; about telephone consultation, the applicant use telephone consultation to complete the communication function with the consultant real-time dialogue; about the appointment video consultation, applicant establishes the applicant and the counselor's video communication through the video consultation module, it mainly includes: video reservation application,

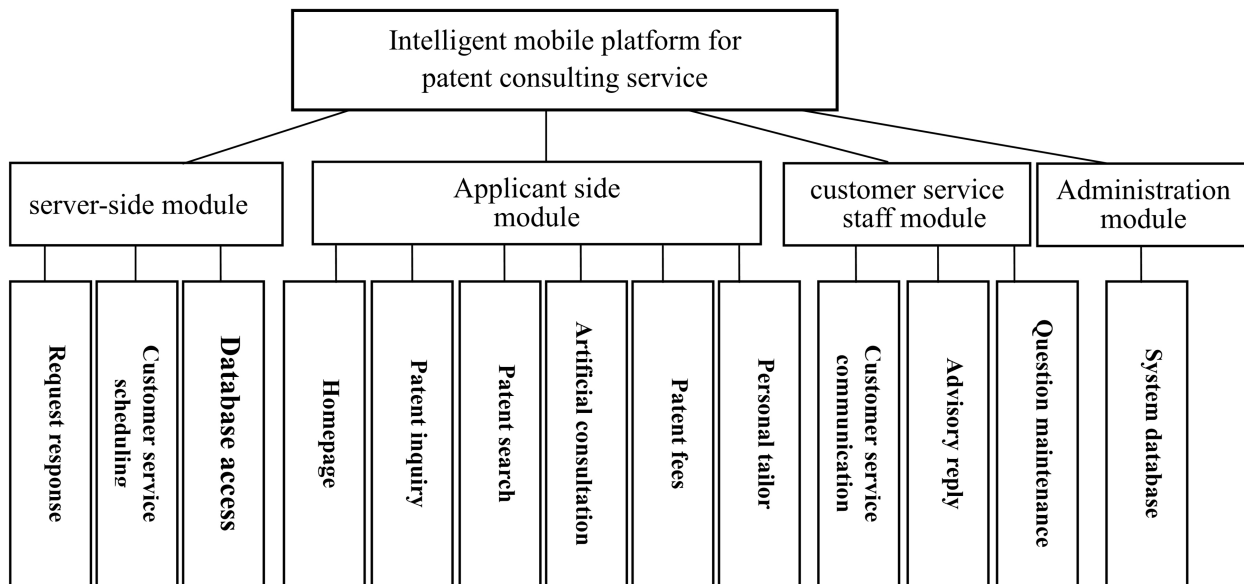


Figure 2. System function setting diagram

input reservation time, main questions and other information, Click appointment, identify video time, attendees after good communication by customer service, and make appointments with the meeting room, then both sides open the video to start consultation on time.

4.4 Patent Expense Module

The module mainly queries the historical patent payment data, you can input the patent number and invention name, then enter the system to query the patent number of the records of historical payment, including the date of remittance, the sender, the amount, cost details.

4.5 Private Customized Module

The private customized module consists of three parts: push service, information collection, view history.

Push service features: personalized, for specific users to provide and change the advisory services; can be developed, flexible and convenient to establish and adjust the consultation methods and processes. Can achieve active push and custom push.

The information collection mainly includes three aspects: A, for the collection of specific issues: the system to provide users with a public Q & A area (in the manual consulting module in the online, voice, video and other consulting methods), after counselor answer the question, the system organizes the questions raised by the user and the answers of the counselors, then records them in the database, the user click on the information collection to view the contents after logging. B, for the specific case of the collection: the system provides users with the search

query function (in the patent query retrieval module), the user can click to collect when retrieving some of the cases of interest, which can be found in collection when user want to view these information. C, view history: a supplement to the collection function, when the user forget to collect or don't timely collect after consulting the problem or retrieving the case, user can click on the browsing history to check it.

5. Conclusion

This article has developed a comprehensive service platform based on Android and IOS operating system, which can realize the customized patent consulting service on the mobile side, and can provide intelligent retrieval service, intelligent service push, interactive learning and co-operation consulting and other multi-dimensional service mode, to meet the needs of a large number of users. It can provide patent searches, patent inquiries, manual advice, the cost of inquiries and other conventional patent advisory services for the public, the applicant, agents, etc. On such basis, considering further development and improvement in functions, such as increasing the private customized services, personalized service model to further facilitate the user, making mobile e-government system better serve the public.

Reference

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