

Invited Talk 2

Expanding the Applications of MT in Patent Translation

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China Patent Information Center (CPIC)



中华人民共和国国家知识产权局
State Intellectual Property Office
of the People's Republic of China

Expanding the Applications of MT in Patent Translation

China Patent Information Center

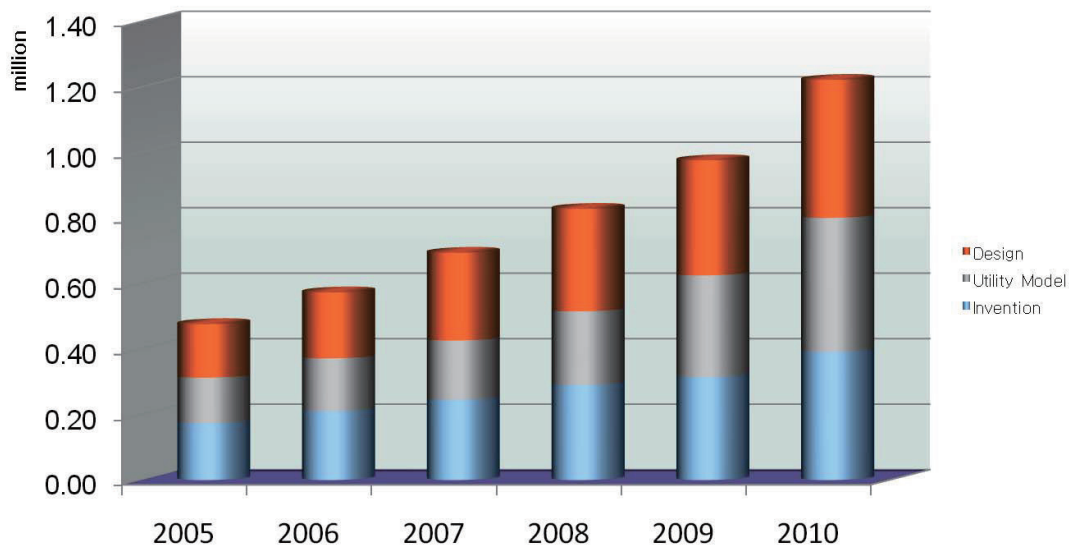
www.sipo.gov.cn

outline

- 1 **Background**
- 2 Expansion to Human Translation Task
- 3 Expansion to Different Targeted Users
- 4 Expansion to Multiple Translation Directions
- 5 Future Work

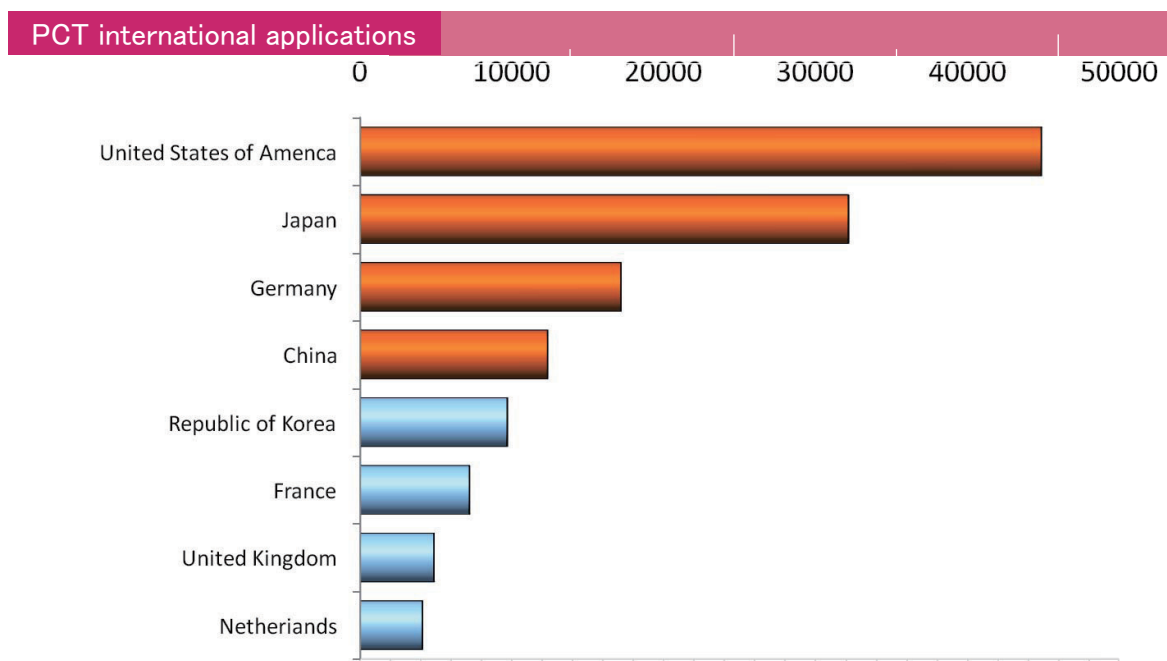
China's Patent Filing Numbers

The number of China's patent filing exceeded one million for the first time in 2010.



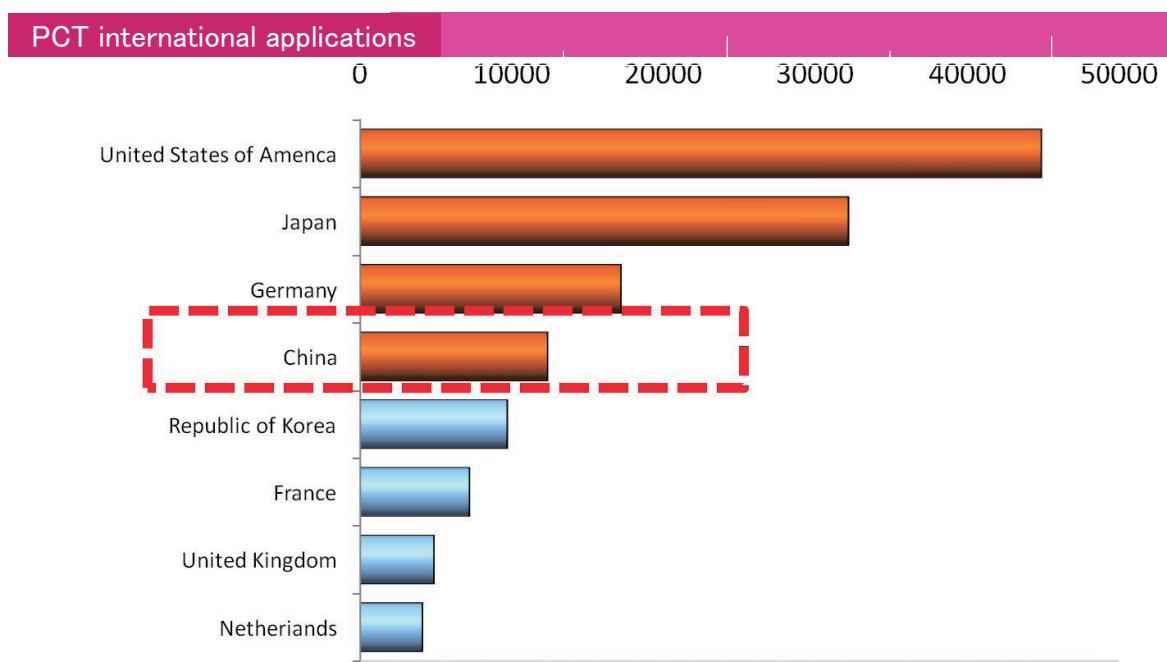
3

PCT Application Nation Ranking in 2010



4

PCT Application Nation Ranking in 2010



5

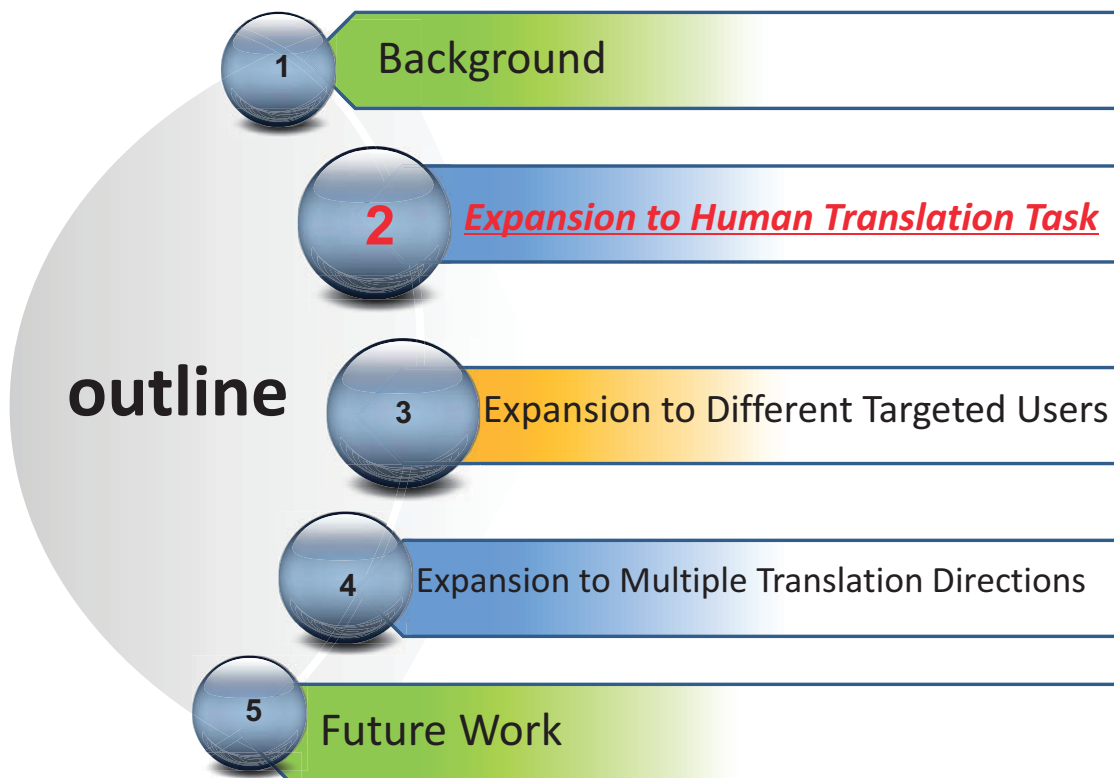
PCT Application Enterprise Ranking in 2010

(3) Published PCT international applications by top applicants

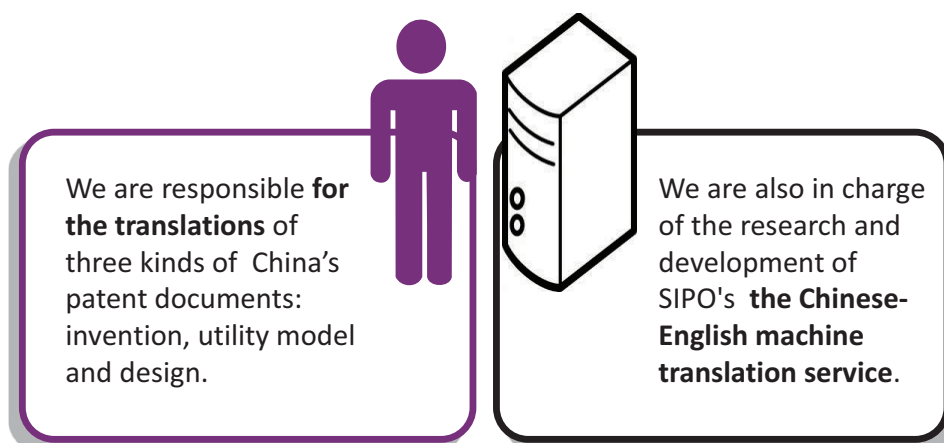
2010 RANKING	POSITION CHANGED	APPLICANT'S NAME	COUNTRY OF ORIGIN	PCT APPLICATION PUBLISHED IN 2010	INCREASED OVER 2009
1	0	PANASONIC CORPORATION	Japan	2,154	263
2	20	ZTE CORPORATION	China	1,863	1,346
3	2	QUALCOMM INCORPORATED	United States of America	1,677	397
4	-2	HUAWEI TECHNOLOGIES CO., LTD.	China	1,528	-319
5	-1	KONINKLIJKE PHILIPS ELECTRONICS N.V.	Netherlands	1,435	140
6	-3	ROBERT BOSCH GMBH	Germany	1,301	-287
7	0	LG ELECTRONICS INC.	Republic of Korea	1,298	208
8	2	SHARP KABUSHIKI KAISHA	Japan	1,286	289
9	-3	TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)	Sweden	1,149	-92
10	-2	NEC CORPORATION	Japan	1,106	37

Source: WIPO

6



Practical Businesses Motivated



CNPAT Translation Management Platform

- CNPAT translation management platform released
- The entire translation processes integrated:
 - process management
 - translation studio
 - quality examination
 - other business processes

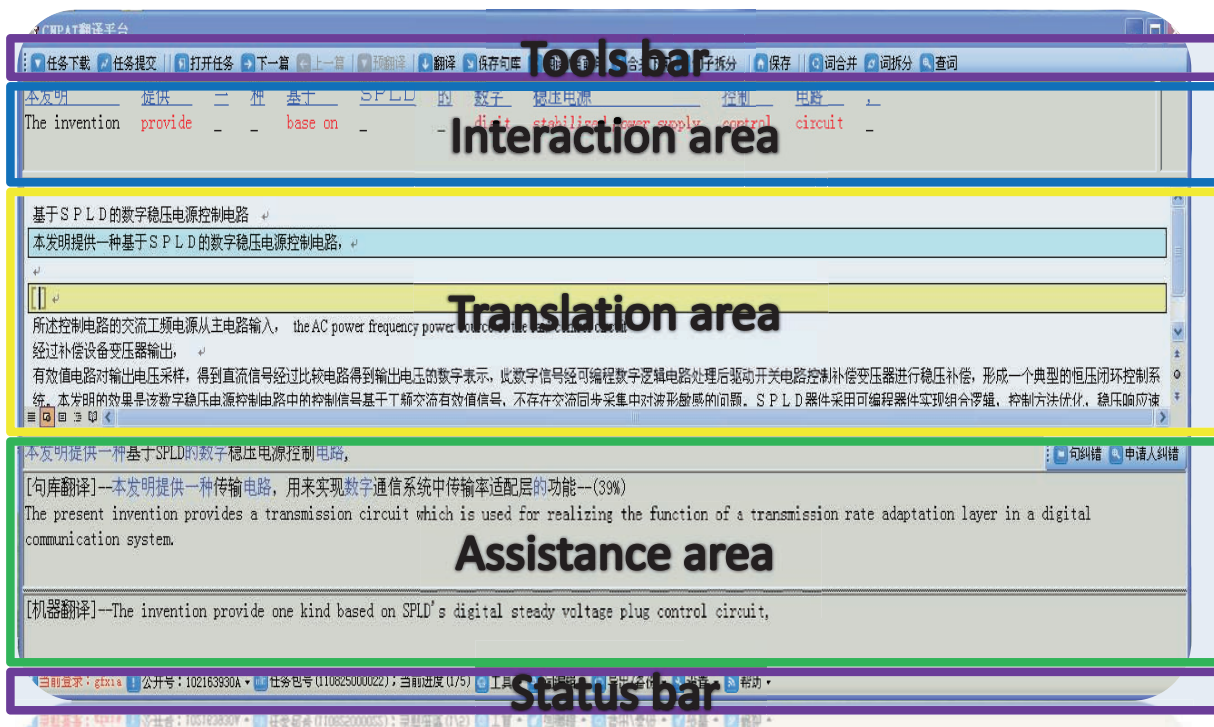
CNPAT Translation Management Platform

- Main features of the translation studio:
 - Integration of the machine translation and translation assistance tools.
 - Different configurations for different translation tasks, e.g., abstract, title, design, application etc.
 - Establishment of an efficient user feedback and knowledge accumulation mechanism.

CNPAT Translation Management Platform

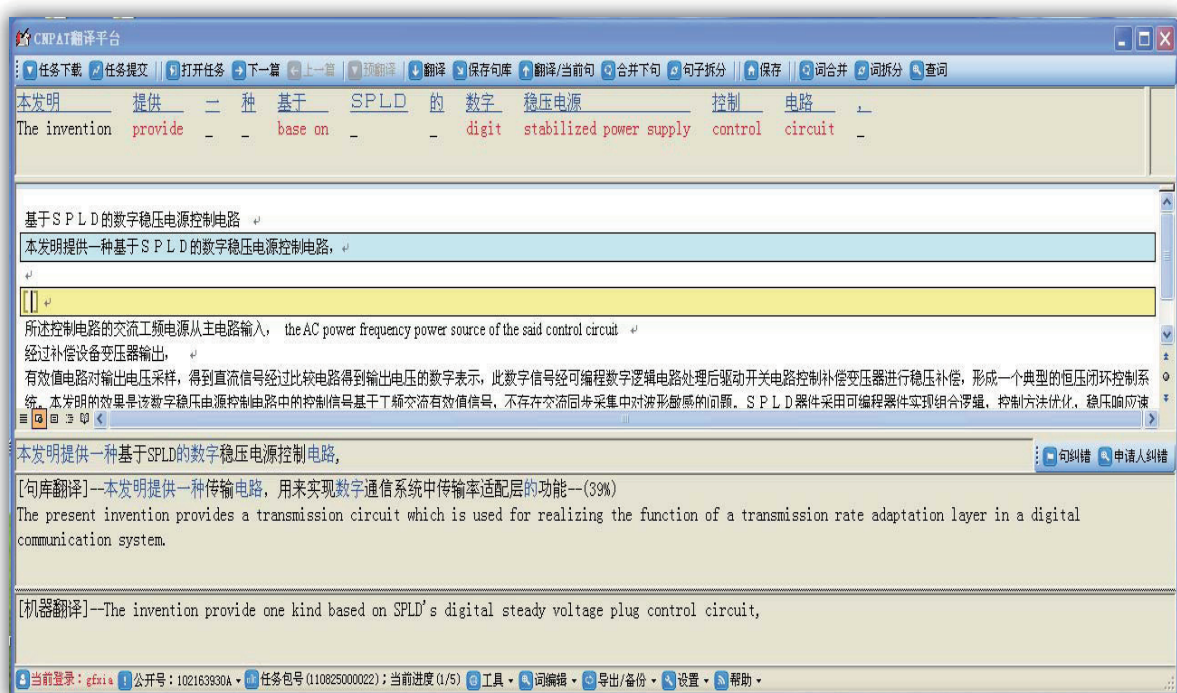


General View of Translation Studio

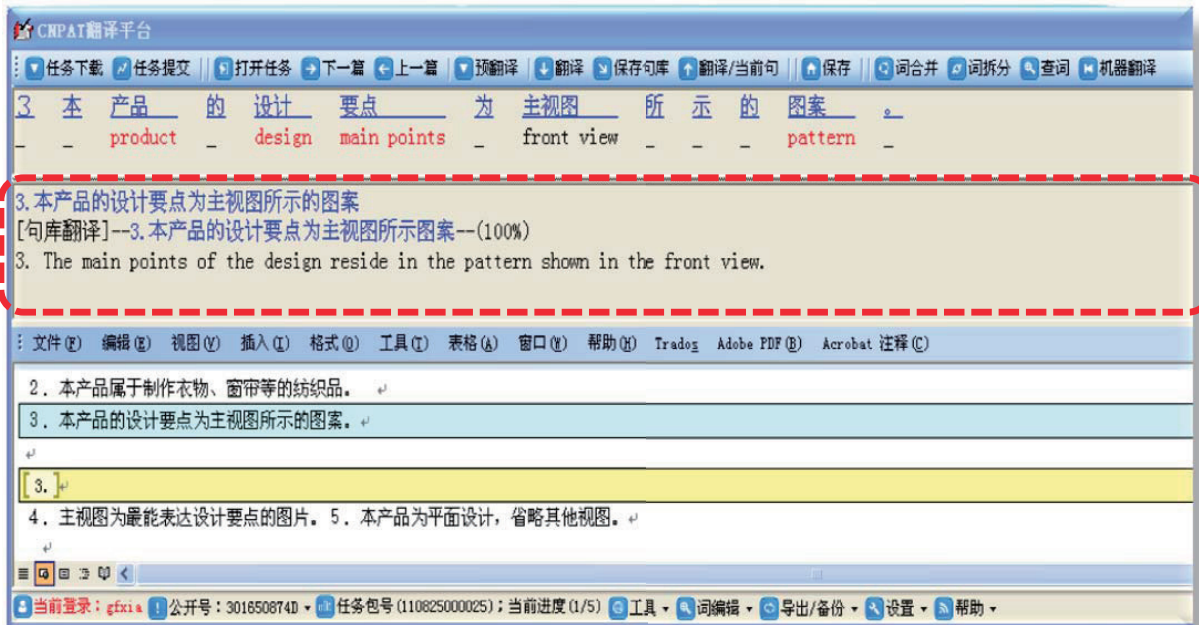


Different Configurations for Different Tasks

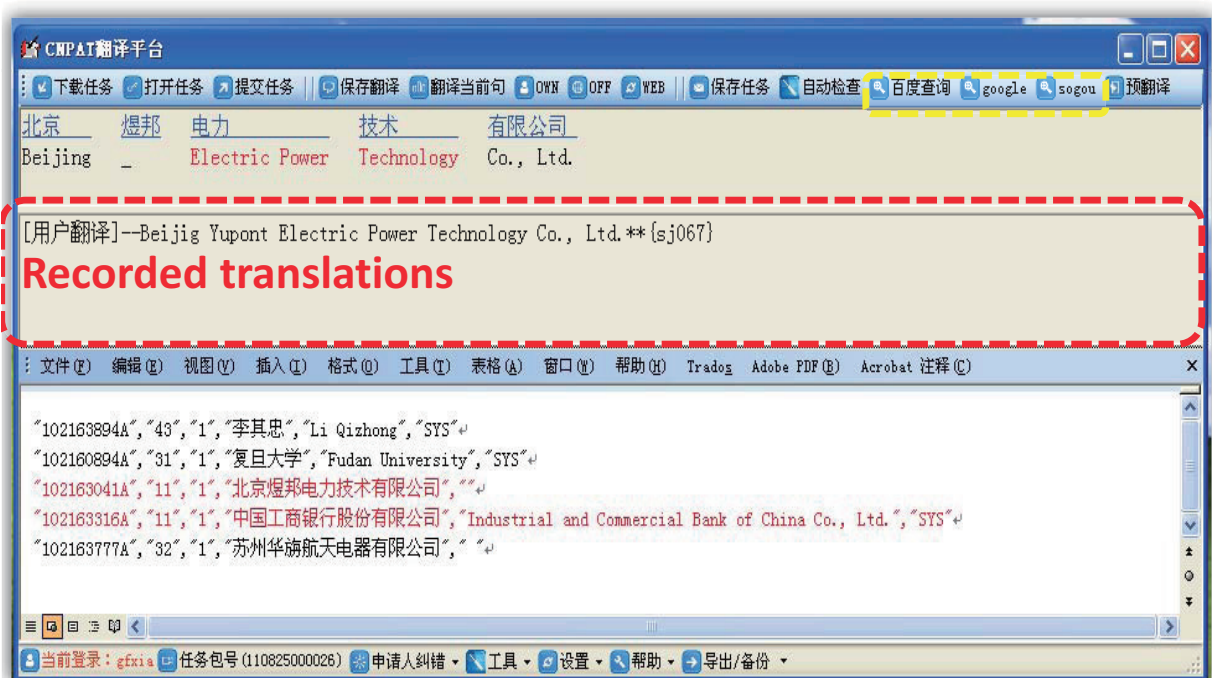
Configuration for the Title and Abstract



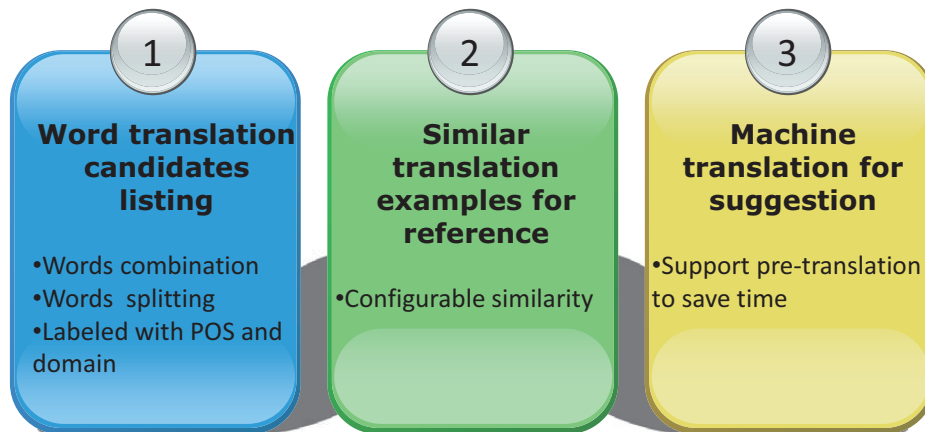
Configuration for the Brief Explanation of Design



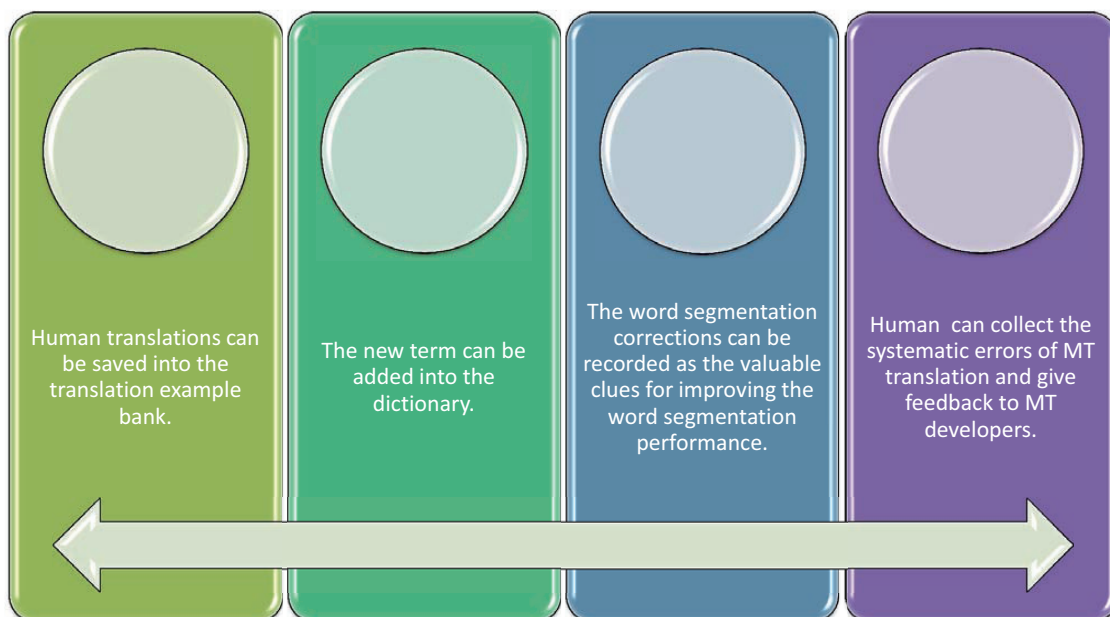
Configuration for Applicants

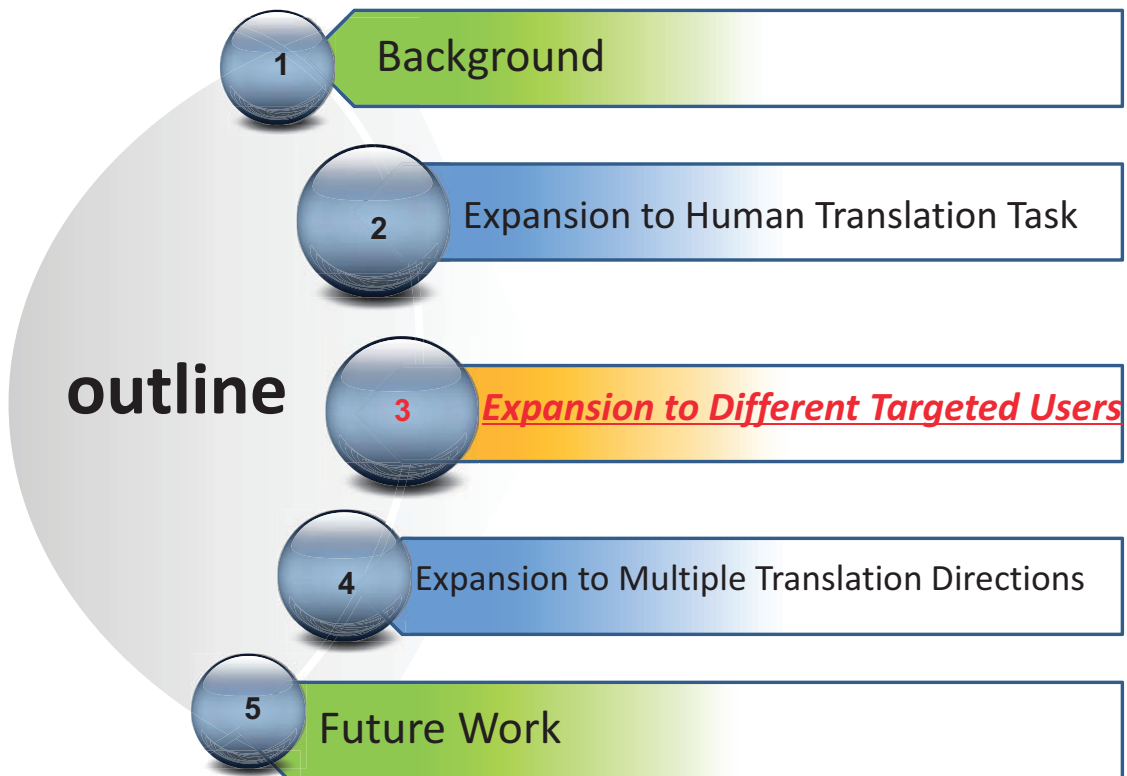


Effective Assistances from MT to HT



Positive Feedback from Human to MT





SIPO's English Patent Search UI

SIPO
STATE INTELLECTUAL PROPERTY
OFFICE OF THE P.R.C.

Home About sipo News Law&policy Special topic **SITE SEARCH**

SITE MAP CONTACT US PRODUCTS&SERVICES RELATED

SIPO-USPTO IP Management and Commercialization Seminar Held in Beijing
In a bid to provide university scientists and researchers, individual inventors, IP experts and other interested parties with information on how to set up a technology transfer ... 2011-08-05

Numbers has been updated 2011-08-25
China's IP Manual has been updated 2011-08-25
Core Technology Standard Project Files over 300 Patent Applications 2011-08-25

Patent Search
Title
Search
Search Report

Patent Search
Statistics
Patent Application
Patent Examination

LAW&POLICY
SPECIAL TOPIC

Layout Designs of Integrated Circuits
Related Laws & Regulations
White Papers on China's Intellectual Property Rights Protection

Patent Information Annual Conference of China (Beijing)
2009 National IPR Publicity Week
China's IP Manual
Numbers
EPO-SIPO Joint International

SIPO's English Patent Search UI



Step1: input query

Step2: click the title



Step3: request the machine translations

Machine translation launch button



Machine Translation of Descriptions and Claims

The screenshot displays the CPMT website interface. At the top, there is a header with the CPMT logo and the text "China Patent Machine Translation (CPMT)". Below the header, there is a search bar and a "MT Guide" link. The main content area shows a patent document with the following text:

CPMT Introduction: According to the rapid development of Chinese patent cause, Chinese patent documentation plays a more and more important role in the world's intellectual property field. China Patent Information Center, which is a large national patent information service center, has made a breakthrough in machine translation of Chinese patent documents—the user-friendly, fast, stable online Chinese-English machine translation system, so that we can provide users automatic machine translation services through the Internet in the international patent documents exchange and cooperation. CPMT researched and developed by China Patent Information Center. If you need accurate human translation, please [Contact Us](#).

Application: 201010000081

1. the online automatic detection device of a glass defect

Two piece white CCFLs are arranged at the source bottom of the case portion. The case (2) are airtight structure, the case lies in waits to detect glass defect. Camera (4) are the high resolution camera. The glass (3) top, scanning line and scanning line.

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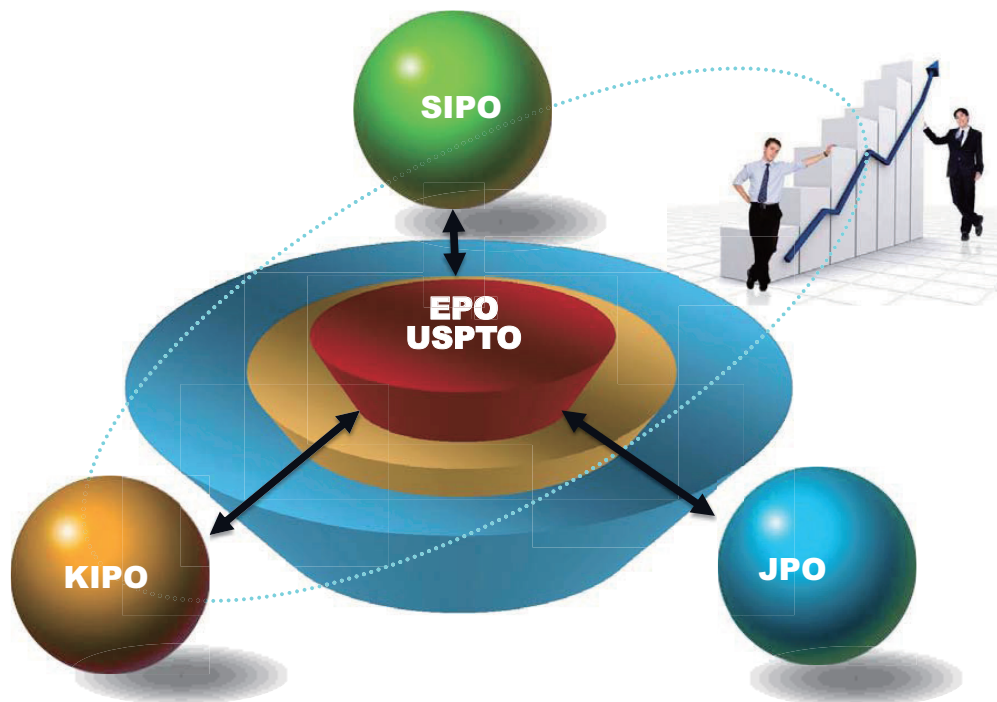
Application: 201010000081 [First](#) [Prev](#) [Next](#) [Last](#)

The online automatic detection device of a glass defect

The technical field:
The invention belongs to industry detection technique field, specifically relates to the online automatic detection device of a glass defect.

The background art:
Defect such as inevitably produce fish tail, bubble and be mingled with in the glass production process. How to detect the defect of glass be that glass production enterprise carries out production

IP5' Mutual Machine Translation Project



MT @ Patent Search and Service System of SIPO

The screenshot displays the SIPO Patent Search and Service System interface. On the left, there is a navigation menu with '首页' (Home) and '专利检索' (Patent Search). The main content area is titled '翻译内容' (Translation Content) and is split into two sections: '原文' (Original Text) and '译文' (Translated Text).

原文 (Original Text):

本发明公开了减少在无线网络之间的技术间切换的资源分配。公开的是一种用于减少异类无线网络之间技术间的资源分配的方法。该方法包括第一步骤，完成移动站与切换目标技术网络的网络进入和新会话登记过程。下一步骤包括定义该新会话的活动模式。下一步骤包括等待目标网络处的资源定时器期满。下一步骤包括在定时器期满时为该新会话指配资源。

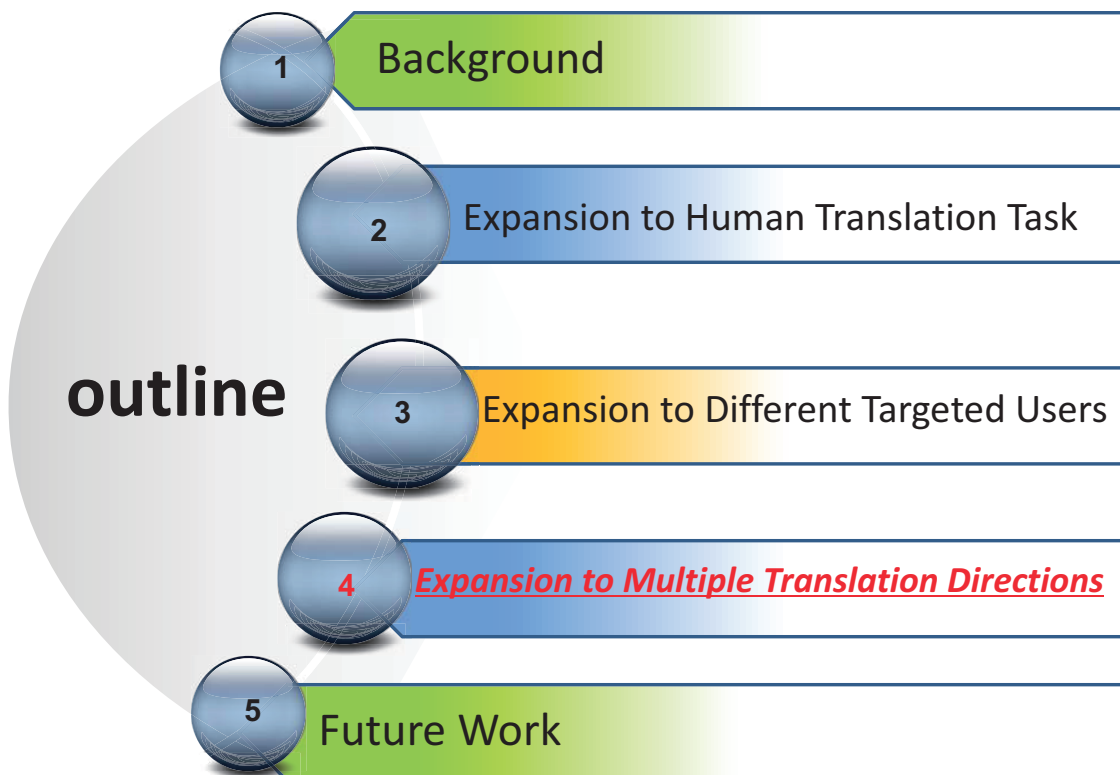
译文 (Translated Text):

The invention discloses and has reduced the resource allocation of switching over between the technique between the wireless communication network.
Disclosed is a method that is used for reducing the resource allocation between the technique between foreign peoples' s wireless communication

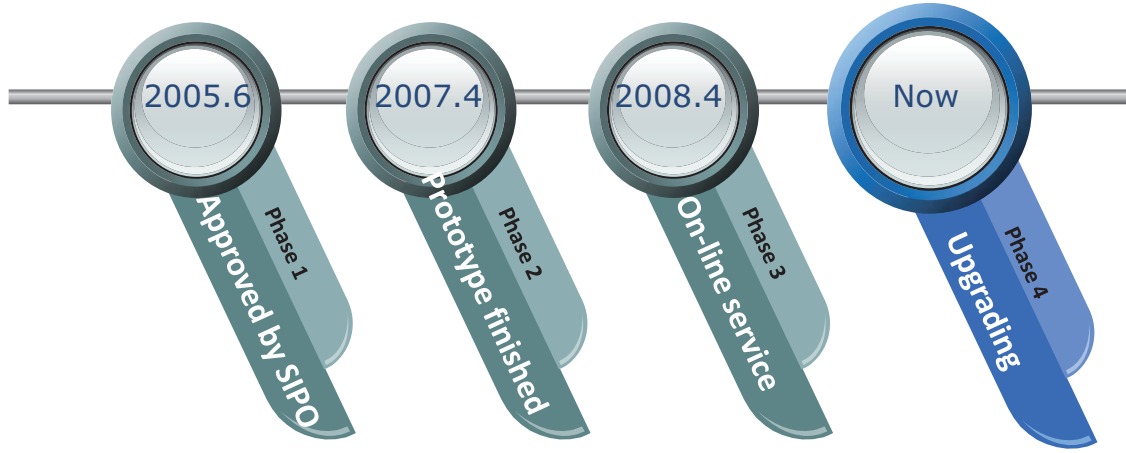
Metadata Table:

申请号	CN201110084492
申请日	2011. 01. 20
公开(公告)号	CN102131285A
公开(公告)日	2011. 07. 20
IPC分类号	H04W72/04; H04W36/14
申请(专利权)人	摩托罗拉移动公司;
发明人	谢哈布·M·赛义迪;
优先权号	US61/296, 537; US13/008, 327
优先权日	2010. 01. 20; 2011. 01. 18
申请人地址	美国伊利诺伊州

摘要 (Abstract): [支持框选翻译] 简体中文->英文 英文->简体中文
本发明公开了减少在无线网络之间的技术间切换的资源分配。公开的是一种用于减少异类无线网络之间技术间的资源分配的方法。该方法包括第一步骤，完成移动站与切换目标技术网络的网



Chinese to English Patent Translation



CEMT of Descriptions and Claims

The image displays the CPMT website interface, including the header with the logo and navigation links, and a sample translated patent document. The document is for application 201010000081 and describes an online automatic detection device for glass defects.

China Patent Machine Translation (CPMT)

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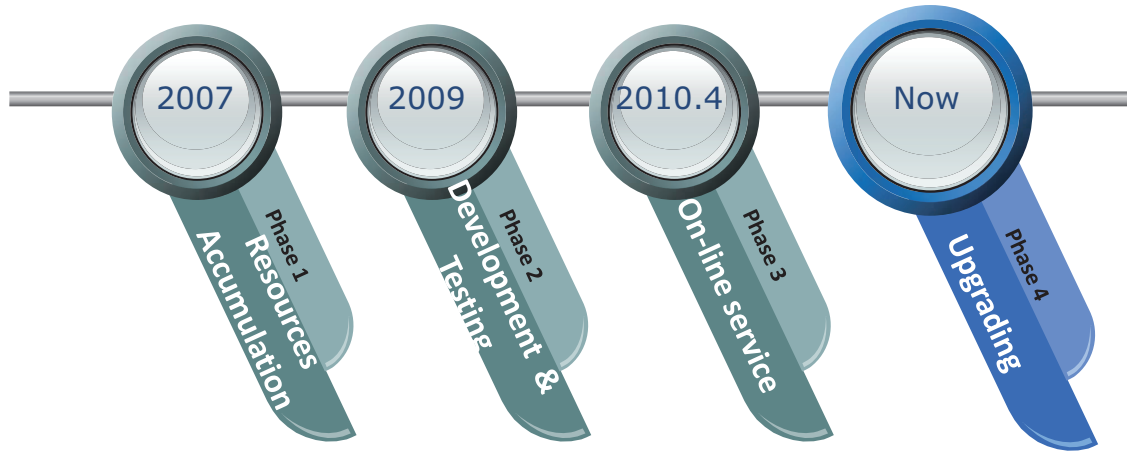
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English to Chinese Patent Translation



ECMT @ pss-system

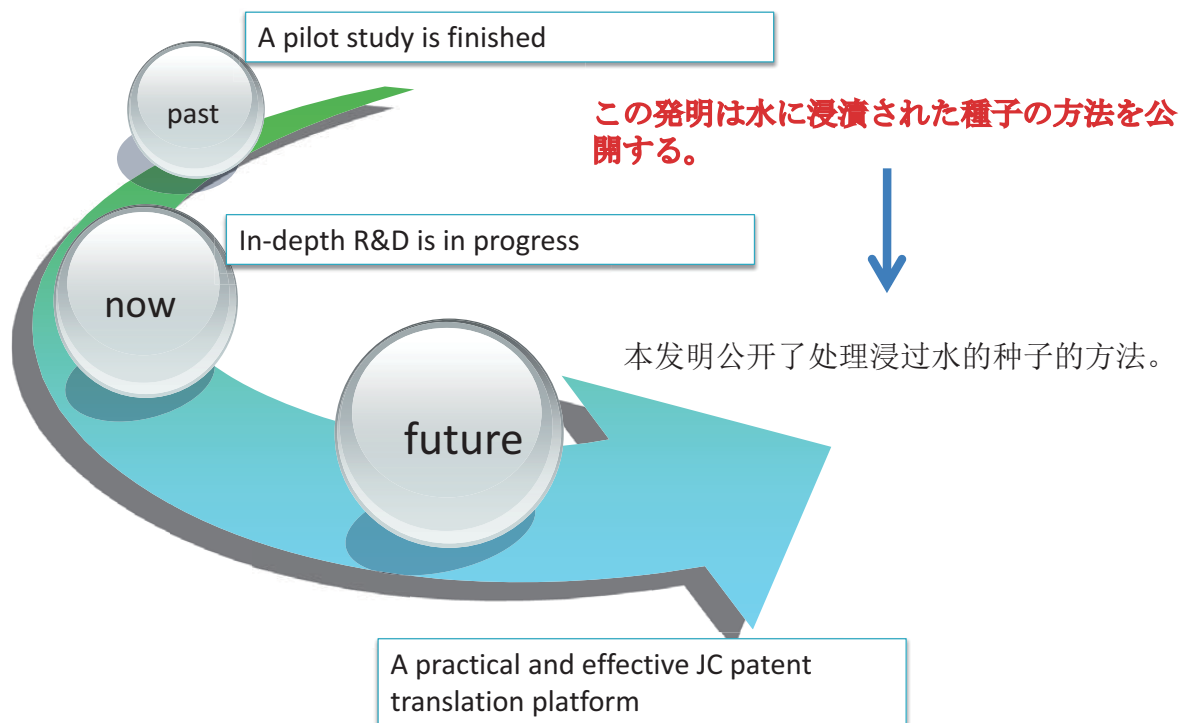
The screenshot shows the ECMT @ pss-system interface with a patent translation tool. The tool displays the original English text and its Chinese translation. A red arrow points to the '摘要' (Abstract) section, and a red box highlights the '英文->简体中文' (English to Simplified Chinese) option.

申请号	US201113036793
申请日	2011.02.28
公开(公告)号	US2011151904A1
公开(公告)日	2011.06.23
IPC分类号	H04W88/02; H04W4/
ECLA分类号	H04N1/32C; H04N1/
申请(专利权)人	MOTOROLA INC;
发明人	MOCK VON A; BAUDIN
优先权	US201113036793; 1
优先权日	2011.02.28; 2006.

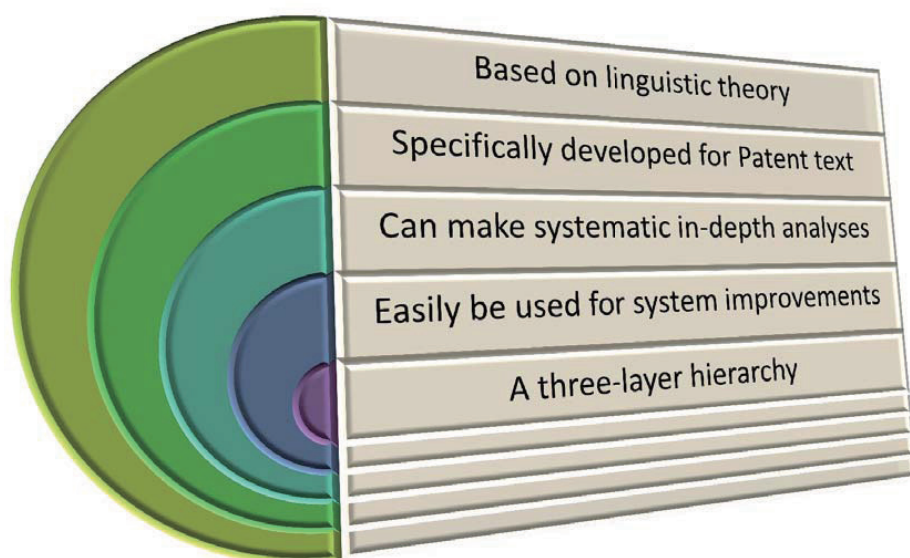
摘要 [支持框选翻译]
 简体中文->英文
 英文->简体中文

Abstract_EN:
 A server includes a communications adapter; a controller and a datastore. The controller receives a first user input via a user interface to associate at least one image attribute with a contact. Thereby, responsive to receiving an image from an electronic apparatus, the controller automatically processes the image to identify at least one feature

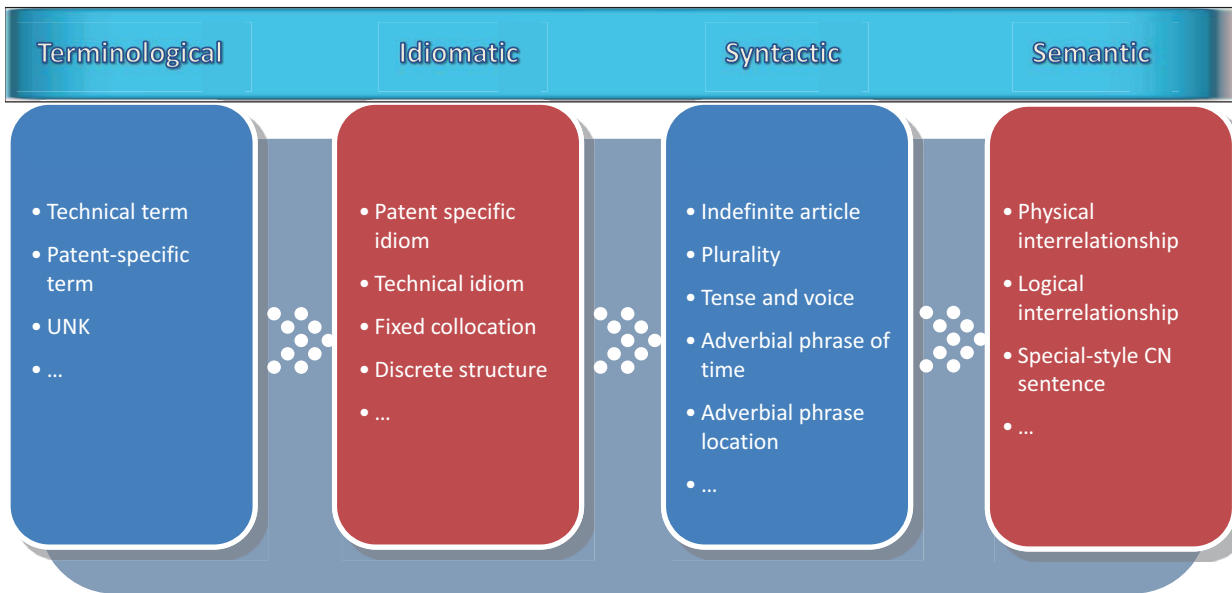
Japanese to Chinese Patent Translation



Check-point Style Evaluation Scheme

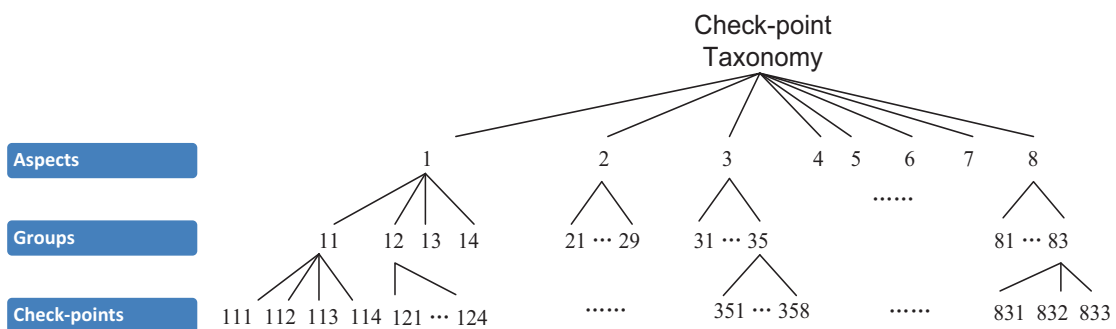


Evaluation Scheme Considerations



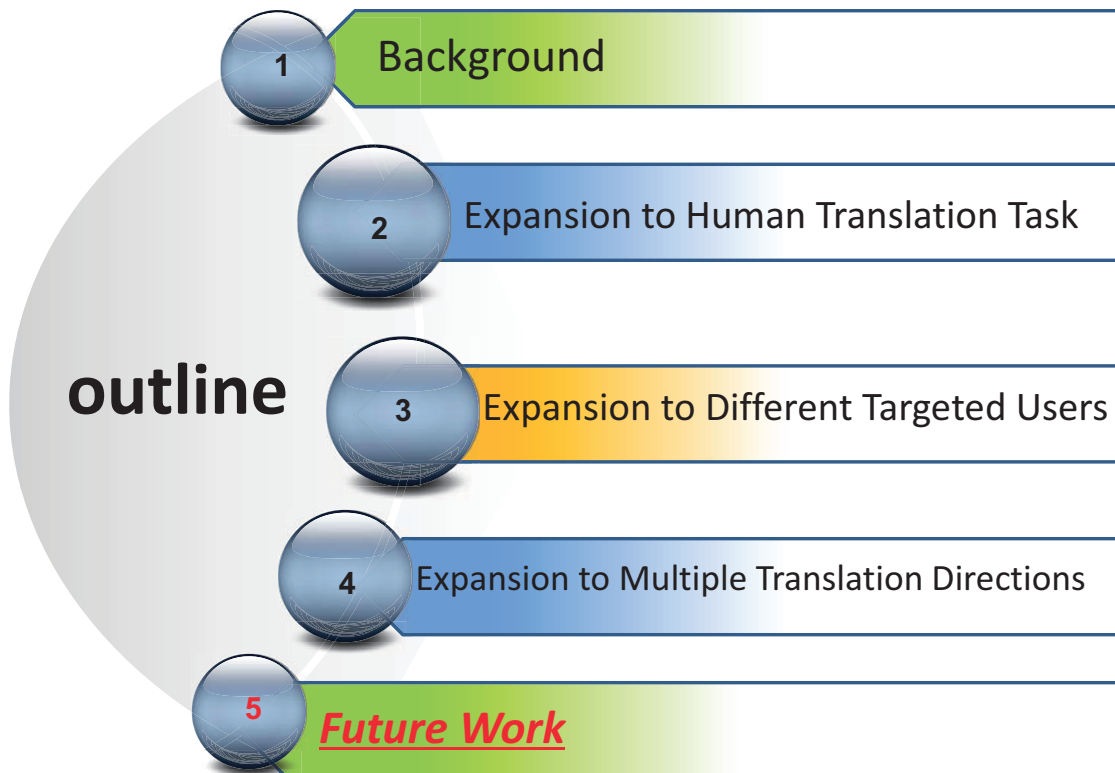
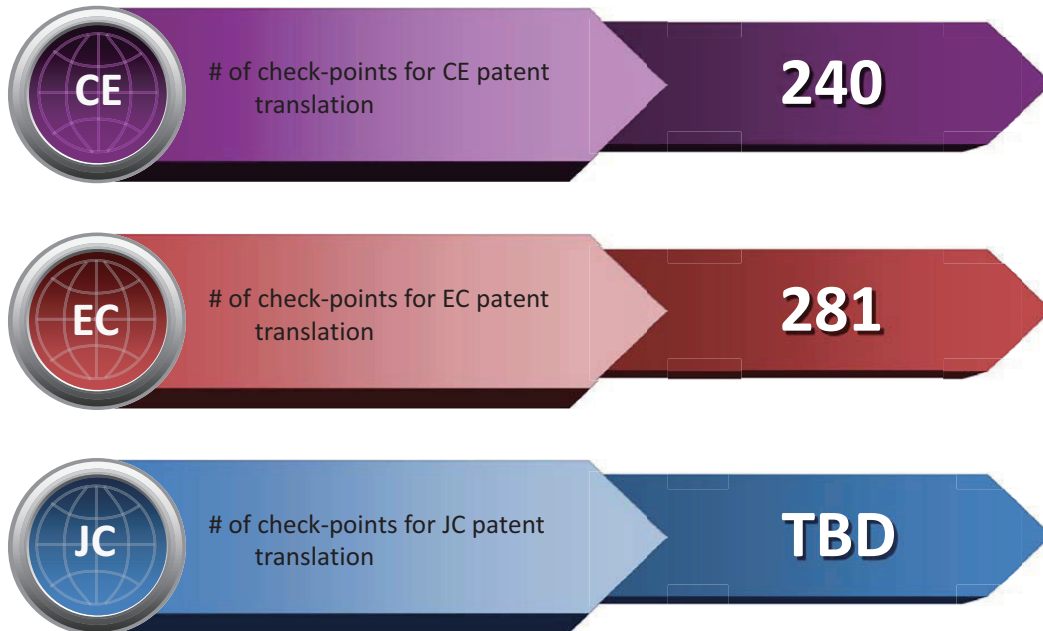
33

Evaluation Scheme Hierarchy



34

Current Status of Evaluation Schemes



Future Work

- To collect & accumulate more useful translation resources
- To explore more patent machine translation technologies
- To enhance our R&D capability through collaboration with colleagues and experts

