出國報告（出國類別：考察）

赴韓國交流報告

服務機關：財團法人專利檢索中心
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派赴國家：韓國

出國期間：103年9月15日～103年9月18日

報告日期：103 年 10 月 2 日

摘 要

財團法人專利檢索中心（以下簡稱本中心）係於民國 99 年 6 月經行政院核定同意，由政府出資捐助於 101 年 3 月 15 日正式登記成立。本中心目前承接經濟部智慧局之「發明專利前案檢索服務計畫」及「專利檢索服務多元化發展計畫」，以協助智慧局辦理專利申請案前案檢索及分類為主要任務，並規劃於未來擴大服務對象至國內各中小企業，提供其智慧財產權諮詢服務、不同開發階段之專利檢索與分析服務、以期能提升本國企業於智慧財產權佈局之國際優質競爭力。

鑑於韓國發明振興會(KIPA)、與專利資訊促進中心(PIPC)，於專利價值評估與鑑定、以及為國內中小企業於開發前、中、後期提供不同的專利檢索與分析服務等相關業務之推廣與執行，成果卓越，為瞭解韓國實際運作情形與推行手法，作為本中心未來發展之參考，並與國外相對應機構維持良好關係，特安排此次參訪行程，包括：與韓國發明振興會(KIPA)進行專利價值評估與鑑定系統與手法意見交流、與專利資訊促進中心(PIPC)進行提供國內中小企業進行開發相關之專利檢索與分析服務意見交流。

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本次參訪原擬參訪機構為韓國發明振興會(Korean Invention Promotion Association，KIPA)、南韓專利情報院(Korea Institute of Patent Information，KIPI) 及隸屬於南韓專利情報院之專利資訊促進中心 (Patent Information Promotion Center，PIPC)，係因南韓專利情報院(Korea Institute of Patent Information)表示已將專利檢索及其相關業務以組織及業務獨立方式，移轉至專利資訊促進中心(Patent Information Promotion Center)，因而建議本中心直接與專利資訊促進中心(Patent Information Promotion Center)進行詳細會議，有利於本中心業務之發展。

故此次參訪機構安排至韓國發明振興會與專利資訊促進中心，該些機構於專利價值評估與鑑定、以及為國內中小企業於開發前、中、後期提供不同的專利檢索與分析服務等相關業務之推廣與執行，成果卓越。為瞭解韓國實際運作情形與推行手法，作為本中心未來發展之參考，藉由本次參訪除了與國外相對應機構維持良好關係，亦可向相關機構學習專利評價系統、對外服務系統規章與環境之建置、推廣等實務操作經驗。

表一　參訪行程表

預定日期	預定時間	參訪機構
9 月 15 日(一)	啟程	
9 月 16 日(二)	上午 9 時 30 分至下午 5 時	韓國發明振興會(KIPA)
9 月 17 日(三)	上午 9 時 30 分至下午 5 時	專利資訊促進中心 (PIPC)
9 月 18 日(四)	返回	

貳、交流過程-韓國發明振興會(KIPA)交流內容

一、韓國發明振興會(KIPA)介紹

1973 年 10 月韓國專利協會(KPA)成立，並於 1994 年 12 月依據發明振興法第 52 條，正式更名為韓國發明振興會(Korean Invention Promotion Association，簡稱 KIPA)，該會於 1995 年~2006 年期間依據發明振興法，設立專利科技訊息中心、專利技術商業化協助中心、智財權研究中心、韓國智慧財產權服務中心、以及遠端學習中心等單位，目前於南韓各地設有釜山、光州、江原道、全羅北道等四個支會，對韓國產、官、學界提供各式智慧財產權加值服務。該會所提供之核心服務業務主要分可為三大類：

1、智慧財產權促進

2、智慧財產權人力資源開發(培育智慧財產權人才)

3、智慧財產權管理(創造智慧財產權價值)

圖一、韓國發明振興會組織圖(資料來源：KIPA)

二、交流過程

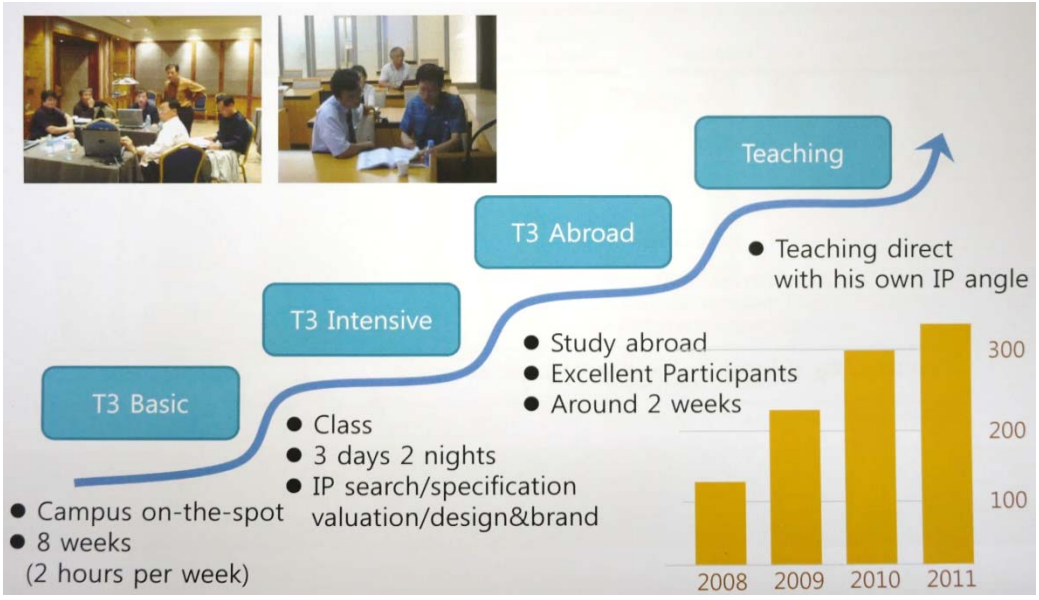
韓國發明振興會(KIPA)首爾總部位在首爾江南區，由國際事務部裴(Bae,Jaewook)經理接待我們，並直接至副會長室拜會趙殷英(Cho,Unyoung)副會長，副會長首先對我們的到訪表達歡迎之意，並對於 2013 年 10 月 1 日拜訪本

中心王董事長所受之禮遇表示感謝，也希望能夠儘速有再一次訪問台灣以及本中心之機會，簡短的寒暄之後於韓國發明振興會(KIPA)的門口合照，便在裴經理的引導之下前往會議室，與相關與會人員交換名片後便入座。韓國發明振興會(KIPA)共 5 位與會，分別為國際事務部金(Kim,Seungbo)總經理、智財權評價暨交易中心專業顧問楊(Yang,Byounghan)博士、智財權評價暨交易中心金(Kim,Jooho)主任、商業化支援部專業顧問鄭(Chung,Yonwoo)先生、以及國際事務部裴經理。

會議由國際事務部金總經理主持，以斐先生之韓國發明振興會(KIPA)簡介簡報揭開序幕，該簡介簡報主要針對韓國發明振興會(KIPA)的 3 個主要核心業務中的智慧財產權人力資源開發(培育智慧財產權人才)、與智慧財產權管理(創造智慧財產權價值)之詳細服務業務內容進行說明，其內容整理如下：

1、智慧財產權人力資源開發

主要目的在於培育智慧財產權相關人才，主要執行項目包括 IP 學院(國人線上學習中心)、環球 IP 學院(外國人線上學習中心)，並於 50 餘所韓國大學開設 120 門智財相關學分課程，供大學部及研究所同學選修；且為了更加落實推廣智慧財產權的觀念，還針對各級大學教授開設專門的智財課程(T3:Teaching The Teacher)、設立 IP Campus，針對國內外不同的客戶需求，不定期開設客製化 IP 專題講座。



圖二、KIPA T3 課程規劃藍圖(資料來源：KIPA)

2、智慧財產權管理

主要目的在協助韓國境內智慧財產權所有權人，管理其智慧財產權、並創造智慧財產權附加價值，主要執行項目包括 IP 管理與金融、技術移轉、IP 評價、IP 行銷。所謂「IP 管理與金融」係由專利事務所顧問、KIPA 同仁、以及民間專家小組組成諮詢團隊，提供智慧財產權人 IP 管理、專利地圖、職務發明、IP 可行性、IP 授權、爭端解決、事業發展、海外行銷等諮詢與規劃服務，截至 2013 年已經有 39 個中小企業已使用或正在使用該等諮詢服務；此外 KIPA 更與韓國多個銀行達成協議，為其所服務之中小企業，提供貸款或融資擔保的服務。「技術移轉」及「IP 行銷」部分，KIPA 除建立線上 IP 行銷平台，該平台包含有國內專利交易資料庫、IP 趨勢、以及非專利之技術資料庫，此外還不定期舉行 IP 拍賣、IP 展售活動。

圖三、KIPA IP-Market 入口網站(資料來源：http://www.ipmarket.or.kr/2013/main/main.jsp)

針對「IP 評價」，KIPA 係建立一專門線上系統 SMART(Systematic Measuring and Rating Patent of Technology)，該系統為一收費系統，提供使用者於線上即時

進行目標專利之價值評估，該系統之評價概念與邏輯，係依據 WIPO 的五大技術領域分野，評估目標專利於所屬技術領域中的價值等級(Grade)，其價值等級(Grade)共分為 AAA、AA、A、BBB、BB、B、CCC、CC 及 C 等九個等級，此外該評價報告中，亦會呈現一個價值分數(Score)，該價值分數則是由評估目標專利本身各項專利指標之強度所呈現的一個代表值。而該系統於評估目標專利之指標強度時，所採用的評價因子係參考歐美各國實行專利評價時所使用的評價因子(如：獨立項數目、附屬項數目、美國專利家族數目、其他國專利家族數目、被引用次數…等)，共選定 44 個評價因子(該 44 個評價因子係為此系統之營業秘密)執行目標專利評估，除可有效減少在評價過程中因為”人為”因素所造成的誤差，並號稱可有效縮短在技術授權或權利移轉過程中至少 25%的時間花費。

該系統自 2010 年開始提供線上服務，初期以韓國當地專利為主，自 2013 年開始也提供美國專利的評價服務，目前該系統已經更新至 3.1 版本，服務對象也從韓國境內拓展至國際(美國目前有 140 個企業為付費會員)。使用者登入後，可直接輸入待評價之韓國或美國專利號進行評估。截至 2014 年 5 月為止，已經登錄的美國專利為 2,544,790 筆(資料購自於荷蘭)。該系統之收費基本為 1000 萬韓幣/年，可評價 1000 筆專利，並可無限量使用專利分析功能。

圖四、KIPA SMART 入口網站(資料來源：http://smart.kipa.org/)

三、Q&A

我方提問一：韓國政府對於專利鑑價業務之執行、相關鑑價機構、鑑價人員是否有明文法規規範？是否有對專利鑑價人員進行考核認定，發出相關證照？對於專利鑑價執行機構是否有相關認證制度或應具備條件？目前在韓國可執行專利鑑價業務的單位有哪些？

對方回應：韓國境內可以進行評價的機構很多,韓國振興會依據發明振興法處理評價相關機構設立問題：韓國專利廳亦依據發明振興法第 28 條，對於申請執行評價業務認證的單位設定四個條件：組織架構、專業人才、基礎設施、評價領域執行經驗，透過發明振興會的發明部門提出申請，轉由韓國智慧財產局來審核。至於個人認證制度部分，韓國目前並沒有政府認證的執照，目前只有一家民間單位---技術評價協會有開設相關課程，並進行認證，頒發證明，所以現在振興會也在準備開設相關課程和認證的工作。

我方提問二：尚未通過審核的單位,如何累積執行經驗？

對方回應：事實上韓國也有某些機構，並未申請認證就已經執行評價業務，故評價領域執行經驗，可以透過挖角有評價經驗的專業人才來代表申請單位整體的執行經驗。

我方提問三：如果前三個條件一致，評價手法/工具/模式不一樣(EX:人工鑑價,系統鑑價)~是否皆可以通過認證申請？

對方回應：不論人工或是系統在申請審查下都沒有差別，只是客戶信賴度上面的問題；每一個領域的評價模式是不一樣的，所以評價模式的認定是由該領域的專門人員來認定該模式是否可行。

我方提問四：目前鑑價目的以哪一種型態最多（技術授權、合併、訴訟、併購、融資…）？如何提升增加鑑價可信度（對投資人，對融資銀行，對買方…）？目前韓國專利的交易市場中，交易前會先要求專業鑑價機構進行鑑價的比例？

對方回應:以 2014.01~2014.08 期間來計算,KIPA 共已經完成 108 件評價案件，還有 135 件評價案件進行中；型態部分以金融機構、銀行給中小企業貸款(IP 金融聯系專利價值評價)的 90 個案件為最多。至於可信度部分，目前韓國當局針對不同評價單位與目的的評價，採用不同提高信賴度方法：1) 如果是金融目的的專利價值評價，就在韓國專利廳和金融機關、韓國發明振興會實施專利價值評價之前實施業務協定，提高事先相互信賴度。2) 如果由評價機關和金融機關實施專利價值評價，韓國專利廳就實施有關專利價值評價的對外公告，評價機關通過向金融機關進行對評價方法及實務處理方案的說明,形成實務者之間的業務信賴度,金融機關進行 IP 活用金融商品開發，向顧客(企業)進行商品宣傳，向顧客(企業)介紹 IP 金融商品。3)在進行及完成對於顧客(企業)的專利價值評價時，根據需要，評價期間的評價負責人向顧客(企業)進行對於評價進程及評價結果的邏輯等說明，對於顧客(企業)形成評價信賴性。然而，儘管專利交易是頻繁的,但是事先進行評價的比例佔整體而言還是偏低的。

我方提問五：執行鑑價方式、流程(基本模型)？

對方回應:韓國發明振興會使用得比較多的專利價值評價方法是專利費接近法。專利使用費接近法是指在專利權人沒有得到專利權的時候,估算所擔負的合理專利費，並核定專利權價值的方法。所估算的專利費現金流量意味著因擁有專利權而不必支付該費用。所以這方法就是從機會費用觀點的專利價值評價方法。對於實物出資、交易、訴訟等進行評價後，如果顧客要求說明評價結果，就編寫專利價值評價結果導出邏輯(評價方法的選擇、評價假設、估算的合理性、評價程序、評價信息的客觀性及信賴性、其他熱門事項等)資料等，並進行說明。

我方提問六：如何挖掘潛在客戶、潛在買方？是否有建立 IP BANK（針對特定扶植產業）？

對方回應：就專利價值評價的應用(實物出資、通過交易的項目化、金融運用、營銷運用等)，韓國智慧財產局、以及韓國發明振興會…等評價機關向顧客(企業)進行持續的宣傳及評價費用支援。不過，目前韓國發明振興會並沒有針對特定產

業建立、提供 IP BANK 的服務。

我方提問七：銀行為什麼會願意信任拿到的評價報告，把錢拿出來給企業貸款/融資？

對方回應：韓國並不是由個人拿著評價報告去銀行貸款這樣的系統，

銀行和企業互相協約，銀行設定特定的貸款方案後，去尋找認為適合該方案的的客戶，變成銀行去投資客戶。此外，銀行的貸款方案，也會透過 KIPA 廣告給 KIPA 的會員/客戶，所以整體而言 IP 金融業務目前正在成長中。當然，在這其中 KIPO 和 KIPA 也花了很大的力氣，一直一直很努力的在教育、說服銀行業：專利這個東西也可以貸款的，並和部分銀行簽約執行相關 IP 金融放款業務。

然而，據韓國媒體於 2013.03 之報導，KIPO 與韓國產業銀行達成協議，推出「專利擔保貸款商品」，係針對具有專利技術之中小企業提供最多 20 億韓元之營運資金貸款。其中欲申請貸款之專利係先由韓國發明振興會等專業機構評估專利價值後，產業銀行再據以決定貸款規模之方式。且，為防止申請貸款公司因經營不善等難以回收資金之情況發生，將籌組 200 億韓元之組合基金，其中 KIPO 及產業銀行分別出資 100 億及 50 億韓元，其餘將自民間投資機構籌得。產業銀行倘於事後發生未能向貸款企業收回資金之情況時，可確保獲得貸款金額之 50%。（網路資料）

我方提問八：專利鑑價執行機構，在開辦鑑價業務之前需具備哪些能力(專利檢索、專利分析、產業分析、市場研究…等)？需要具備哪些專業人才(律師、會計師、技術人員…)？

對方回應：需求人才沒有標準化，但是在執行評價的時候需要考量該專利之技術性、市場性、權利性(專利師)、事業性(會計師)四個分野，係分別由各專門者評價負責人依據評價目的，進行分析評估。

我方提問九：如何認定個別專利之價值？鑑價報告上之最後價值認定是否有考量到專利本身價值？技術面考量(專利本身價值)、如：專利指標 Patent

Indicators(CII、EPI、ETS)、專利地圖之應用？財務面考量(專利交易價格)、如：成本法、收益法…之採用？

對方回應：專利本身價值僅占評價的一部分,還需要考量其他市場性和事業性等問題。例如：有一個產品是一百元，但是若你的產品加上我的專利技術的話，可以讓你的產品評價可以變多。所以不一定每一個產品都會使用專利指標、專利地圖...等，還是需視實際個案狀況和評價目的選擇適當的評估指標。

我方提問十：平均執行一件專利鑑價案件需要多少時間和人力？費用？

對方回應：平均執行時間大約 4~6 周，最長 8 周；每個案件約 4~7 個人，其中包括 4 種專業人員+2 個評價負責人。至於費用部分，KIPA 和金融機構有簽訂合約的合作案收費大約 1500 萬韓元/件，私人企業委託的案件部分，則因案件的複雜程度較高，費用可能會高至 2500 萬韓元/件。

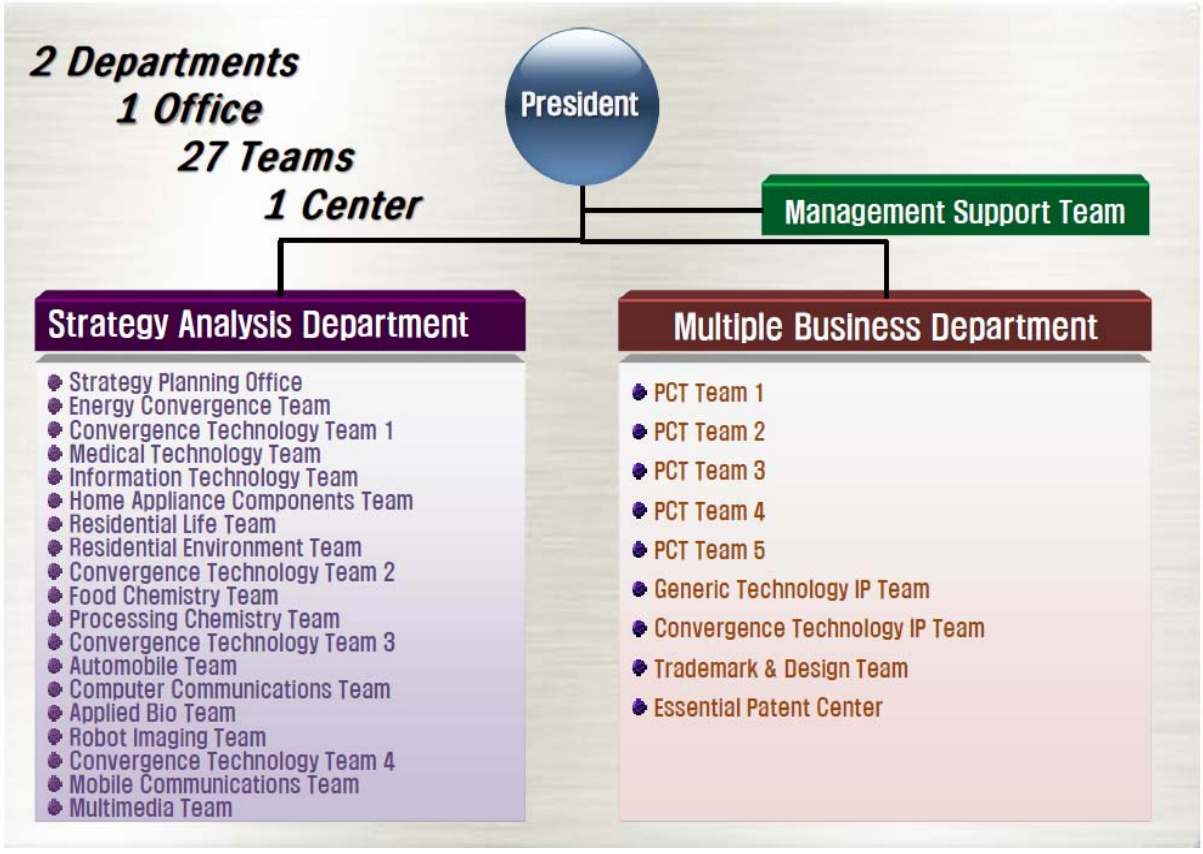
我方提問十一：專利鑑價執行過程中，是否需要進行相關產業分析與市場研究？該等分析/研究由鑑價單位自己執行？或是購買具有公信力之分析/研究報告？會採用哪些資料庫之分析/研究報告（國內、國外）？

對方回應：專利價值評價分成技術性、權利性、市場性、項目性領域進行評價，在市場性評價中形成產業及市場相關分析。由於專利價值評價領域非常龐大，所以需要收集受託的專利技術相關信息而進行評價。但，各種協會、政府機關所提供的重要技術資料等由各評價部門自行收集/管理，並用於評價作業之執行。

參、專利訊息促進中心(PIPC)交流內容

一、專利訊息促進中心(PIPC)介紹

專利訊息促進中心(Patent Information Promotion Center, 簡稱 PIPC)，係因原韓國專利資訊協會 (Korea Institute of Patent Information,簡稱 KIPI)組織龐大並且業務開始多樣化而進行組織重整與業務分割獨立出來的，於 2011 年 7 月成立 PIPC，目前設置有 2 個總部、 1 個辦公室、27 個小組、1 個中心，目前人數約 600 人，其中檢索業務員約 450~500 人，55 位負責民間委託檢索業務。



圖五、PIPC 組織圖

該中心業務來源及提供之核心服務業務如下：

A、承攬KIPO專利委外業務

a.發明、新型前案檢索業務

b.IPC分類業務

c.商標及設計前案檢索業務

B、民間委託檢索業務

a.發明、新型前案檢索業務

b.專利分析、商業化等業務

c.訴訟案件檢索調查

二、交流過程

專利訊息促進中心(PIPC)總部位在首爾，距離位於大田的 KIPO 車程有 2 小時，目前 PIPC 承接 KIPO 業務之部門移至大田辦公室，以方便與 KIPO 之審查委員在業務上之溝通，承接民間業務等部門則留在首爾辦公室，PIPC 由 Management Support Team 的部長 Mr. Cho Kyung-Chul 接待我們，並直接拜會 Multiple Business Department 的部長 Mr.Young-Chang Cho，部長對我們的到訪表達歡迎之意，專利訊息促進中心 (PIPC)交流行程分為上下午二個場次，總共 5 位與會，由 Management Support Team 的部長 Mr. Cho Kyung-Chul 為會議主持人，其它與會人員分別為 Convergence Technology IP Team 組長 Mr. Bong-Jin Kim、Generic Technology IP Team 組長 Mr.Yun-Mo Yang、Convergence Technology IP Teame 高級職員 Mr.Young-Won Seo 及 Management Support Team 高級職員 Mr.Moom-Young Jung。會議共分三階段，首先專利訊息促進中心(PIPC)先請我們觀看介紹影片， 之後，再用簡報對專利訊息促進中心(PIPC)的發展、組織業務等做進一步的說明，最後為 Q&A 時間，以下就會議的內容說明。

三、Q&A

我方提問一：民間委託檢索案件的模式為何?如何對檢索報告內容進行溝通(與客戶當面或電話溝通)?PIPC承接民間委託檢索業務時，其軟體及硬體有無重新建置或規劃?承接民間委託業務是否有須留意之處?

對方回應：PIPC承接民間委託案件種類很多，大致分為1.研究開始前的調查，2.研究中為解決技術問題的調查，3.研究結束後為申請專利前之範圍調查，4.訴訟調查案件委託，對於委託案件會先當面與客戶討論確認所需內容並決定費用後

再執行，PIPC會先將查到的資料提供給客戶，若客戶認為所找的資料不是其所想要的內容則會退回PIPC，請PIPC再繼續找。 PIPC承接KIPO及民間委託案件所使用之系統相同，皆由PIPC自己購買資料庫整合至KIWEE系統[1] (http://www.kiwee.or.kr)，PIPC共計由55位承辦人員負責民間委託案件，而該承辦人員至少要有10年相關經歷(其中5~6年承辦過KIPO案件)，承接民間委託業務最重要為客戶之委託案件內容作保密責任。

圖六、KIWEE系統服務項目

我方提問二：民間委託檢索案件資料以文獻、產品雛型、專利申請、訴訟調查等不同方式提供時，PIPC檢索策略各自為何? 收費方式及所需人力各為何?可否各舉一案例說明並提供相關表單供參?

對方回應：由於民間委託案件種類很多，需求也各有所不同，所以會依照客戶委託內容決定服務內容項目，價格也會有所不同，費用由50萬~1億韓元，若所需人力以費用來計算，舉例：50萬韓元之案件，需要1人，約2~3天完成，1億韓元之案件，須先與委託單位進行內容討論確認後進行議價，再依委託案件內容考量承辦人員經歷、薪水、背景組成團隊承接，對於提供報告格式及案例，由於PIPC

[1] KIWEE 系統：為 PIPC 建置全面的專利服務，旨在為客戶提供各種服務，如現有技術檢索，專利地圖，專利統計，專利評估，諮詢和培訓。

與委託單位皆有簽保密協議，所以不方便提供，請見諒。

我方提問三：PIPC承接民間委託檢索案件是否會與其他相關業務之民營單位有競爭關係?

對方回應：PIPC為公共機構，扮演韓國承辦民間委託業務市場之開拓先鋒者，故與其他承辦相關業務之民營單位並無競爭關係。

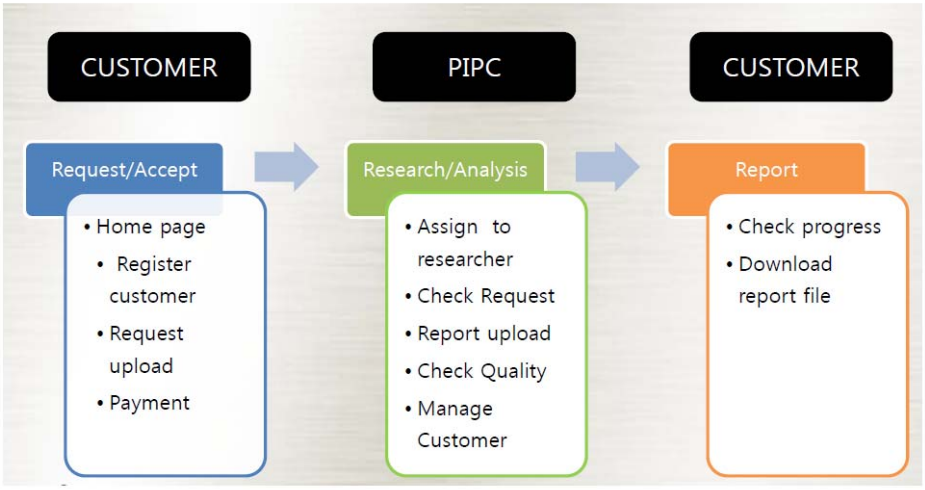
我方提問四：請問民間委託單位(專利申請人)若在向KIPO申請專利前先委請PIPC進行檢索，民間委託單位(專利申請人)是否有相關優惠?

對方回應：民間單位委託PIPC進行技術前案檢索調查，PIPC會向該單位收取檢索費用，該單位會將PIPC檢索結果報告在申請專利時附給KIPO，該案件僅有縮短專利審查時間之優惠，申請專利費用並未減少。

我方提問五：PIPC如何考量民間委託檢索案件難易程度以決定是否承接(由主管或檢索人員判斷)?案件承接方式是由主管分配或檢索人員自己爭取?是以個人或團隊方式承接?

對方回應：對於民間委託之案件不論難易全部接受，並透過KIWEE系統作分配，系統派案是依照承辦人員之領域別及經驗作考量，但承辦人員對於所分配到之案件為非領域別者可以退回，由系統重新再作分配，對於承接金額較大之案件時則需依照案件內容範圍及領域由主管主持會議決定由哪些人員共同組成團隊承接。

＊民間委託之客戶可透由KIWEE系統線上提出委託案件需求及付款，PIPC於線上收到該需求後，依據客戶需求內容將案件派案給相關領域承辦人，案件完成後客戶可由線上直接下載報告。



圖七、KIWEE　business system

我方提問六：PIPC是否會依據分配於檢索人員之案件難易程度進行工作案件量調配? 如何計算?對於檢索人員承接KIPO及民間委託之案件量其計算方式是否相同?

對方回應：由於PIPC承接民間案件的態樣很多元化，若以案件收費舉例：以收費為50萬韓元之案件為例，則每人每月須作16~20個案件，以收費200~300萬韓元之案件為例，則每人每月須作6~7個案件，收費為1億韓元之案件，則以團隊方式承接，約3~4個月完成，依照案件數量及案件內容難易度作調配，案件數量若較多時同仁會加班完成，加班則有加班津貼，該加班津貼亦有上限額度。

我方提問七：對於民間委託訴訟案件調查(檢索)目的為何? 收費方式為何?

對方回應：訴訟案件調查分為兩種，一種為無效調查，另一種為侵害調查。無效調查之進行方式為在調查前先查出每個案件之專利家族，檢視該專利案在其他國家申請之審查內容，並進行相關核心關鍵字搜尋，檢索關鍵字及檢索式必須與原來審查委員檢索方式不同，若仍找不到前案則該無效調查不成立，無效調查之費用比一般調查多3~4倍，該類案件委託較多。侵害調查之進行方式會先考量產品與專利之相關性，該產品是否有應用到該專利技術，侵害調查1件費用至少300~500萬韓元，該類案件較難且案件不多，通常由大企業委託較多。

我方提問八：PIPC所建置之專利評價工作系統(K-PEG系統)[2]對外使用對象為何?收費方式為何?

對方回應：PIPC為擔任韓國發掘新事業、活絡國內企業申請專利之公共機構角色，有關建置專利評價工作系統(K-PEG系統)係為PIPC自行出資建置，PIPC設置專利評價工作系統(K-PEG系統)目的係為公益而非收益而作，其係為企業解決專利維護費問題，企業會透過該系統篩選專利是否維護或放棄，通常1件委託案件為2萬~5萬韓元。

圖八、K-PEG系統

我方提問九：PIPC未來發展重點為何?

對方回應：PIPC未來將朝向協助客戶聚焦在該公司所製造之產品模組化之主題式資料(Topic database)建置，協助訓練客戶之研究人員建置該公司產品之專利相關資料庫，以期縮短檢索時間，提高研發效能。

[2]專利評價工作系統(K-PEG 系統)：透過系統設定的 25 項因子項目進行電腦運算與分數加總呈現，針對其專利技術的評價進行有效性分析，其評價項目分為權利性指數、技術性指數及商業性指數，該系統亦具有分析專利生存指數(Patent Survival Index)的功能，可按照每個技術領域研究專利維護期限，並給出按照技術類別的專利生存率，其指數共分 9 個等級(從強到弱：S,A1,A2,A3,B1,B2,B3,C1,C2)。

肆、心得及建議事項

一、心得

透過此次的參訪，主要瞭解到韓國發明振興會(KIPA)對於專利評價業務的推廣與執行方式，該會除與國內主要知名銀行簽訂合約，推出IP金融貸款、融資等金融產品，供該會客戶媒合與申請，更建立一套快速且方便的線上評價系統，擺脫傳統對於專利分析評價需費時、費力的刻板概念。提供一種經濟實惠的服務，是KIPA的SMART系統能在短短3~4年間跨出國界，躍上國際舞台的主要原因。另透過拜訪專利訊息促進中心(PIPC)亦瞭解該中心在民間委託業務之執行方式，該中心在民間委託業務之經驗與制度上皆為穩定成熟階段，其明確服務與系統定位、強調公共服務與商業服務之劃分與結合，亦是本中心規劃未來業務發展時的參考模範。

表二、SMART、KPEG系統建置基礎比較

	SMART	KPEG
運營單位(背後金主)	KIPA(韓國專利廳)	PIPC(韓國未來部)
建置費用	55億韓幣	20~25億韓幣 (人力成本佔大多數)
收費	1000萬/年*1000件 (買評價送分析)	1萬~4萬/件 (特殊需求另洽)
優勢	*可同時處理大數量專利 *日本合作接洽中	*該評價系統擁有專利權
主要目的	提供使用者決定是否需要繼續維護專利權	

二、建議事項

(一)透過參訪學習PIPC有關執行民間委託業務之方式，該單位於民間委託業務已具相當規模及經驗，可作為本中心在未來執行民間委託業務服務之參考，中心在執行該業務前建議應先制定服務範圍、內容、作業程序SOP及收費方式等，另建置對外服務所需之推廣DM、簡報、網頁等，亦可辦理相關業務推廣說明會，藉以宣傳本中心之服務項目及能量，拓展對外服務業務。

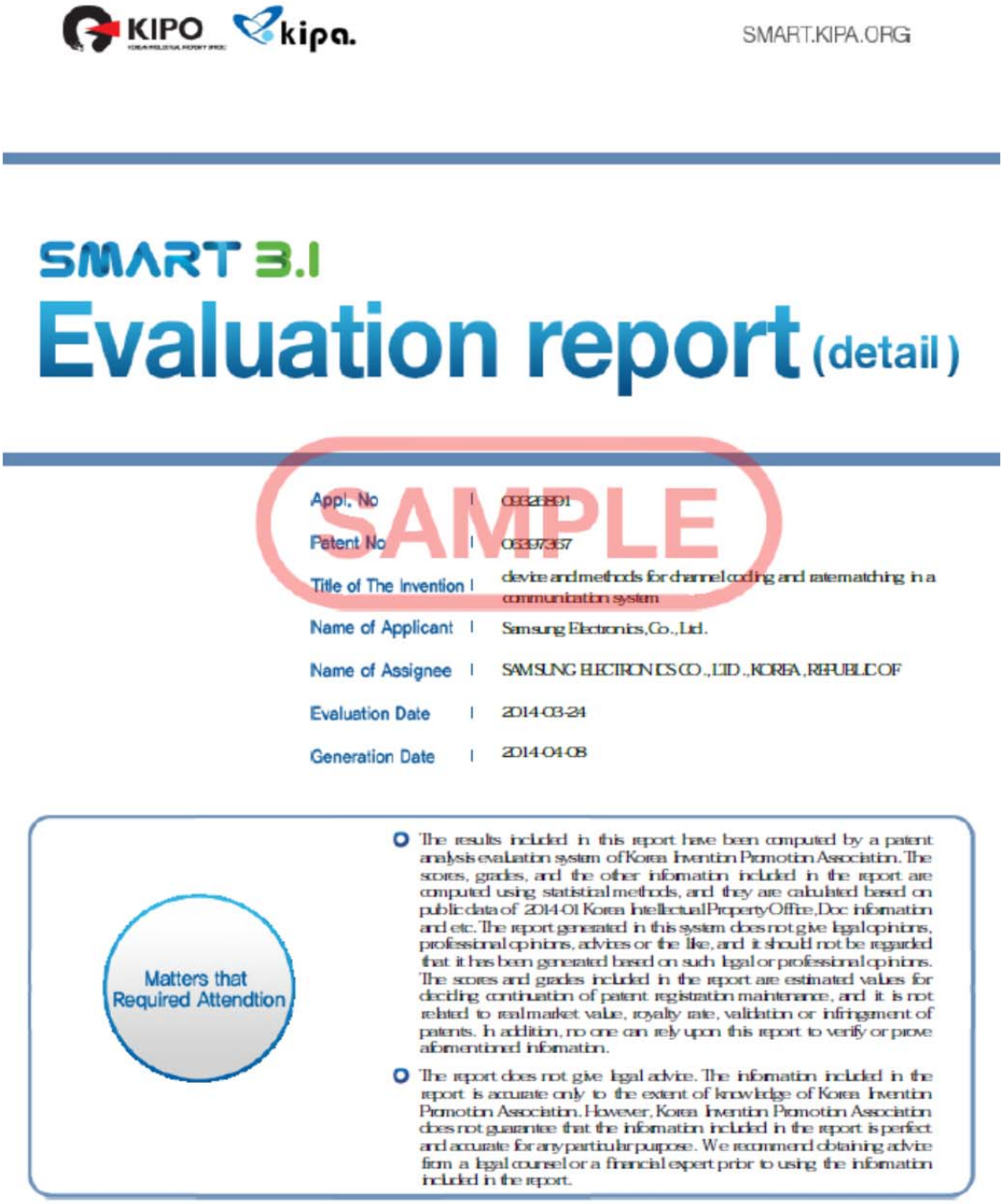
(二)國內相關學研機構、財團法人等單位在申請政府計畫前皆需作研究前或未來研究後之專利申請之調查分析規劃，建議本中心可先以該些單位作為第一階段重點服務對象，拜訪此相關單位並討論該等單位是否有此方面之需求並進一步尋求策略聯盟之可行性，從合作案件中累積相關經驗作為未來承接企業等較大服務案件之實力。

(三)國內相關智慧財產服務機構大部分會先取得經濟部工業局技術服務機構服務能量智慧財產管理、評價、加值等登錄證書認證，本中心亦可於累積相關服務經驗後先取得該認證，進而能成為智慧財產技術服務機構，並藉由政府計畫資源，協助廠商智慧財產管理、加值、評價等服務。

(四)參考本次參訪之兩個機構，其共同的特色都在於提供一套線上服務系統，提供即時且迅速的客戶服務，不論是線上評價、線上檢索、線上教育訓練、甚至是線上交易媒合等不同階段的IP加值服務，使用者不需透過繁複的申請，不受時間地點的限制，隨時皆可使用，大大提升用戶端使用該等服務的意願以及便利性，建議本中心也可參考該等線上服務系統之設置與使用，逐步開拓服務市場及服務業務。

伍、附錄

一、KIPA SMART 系統評價報告範例



KIPO kipa. SMART.KIPA.ORG

SMART 3.1

Evaluation report (detail)

SAMPLE

Appl. No	I	03328891
Patent No	I	03397357
Title of The Invention	I	device and methods for channel coding and ratematching in a communication system
Name of Applicant	I	Samsung Electronics,Co.,Ltd.
Name of Assignee	I	SAMSUNG ELECTRONICS CO.,LTD.,KOREA,REPUBLIC OF
Evaluation Date	I	2014-03-24
Generation Date	I	2014-04-08

Matters that Required Attendtion

- The results included in this report have been computed by a patent analysis evaluation system of Korea Invention Promotion Association. The scores, grades, and the other information included in the report are computed using statistical methods, and they are calculated based on public data of 2014-01 Korea Intellectual Property Office,Doc information and etc. The report generated in this system does not give legal opinions, professional opinions, advices or the like, and it should not be regarded that it has been generated based on such legal or professional opinions. The scores and grades included in the report are estimated values for deciding continuation of patent registration maintenance, and it is not related to real market value, royalty rate, validation or infringement of patents. In addition, no one can rely upon this report to verify or prove aforementioned information.
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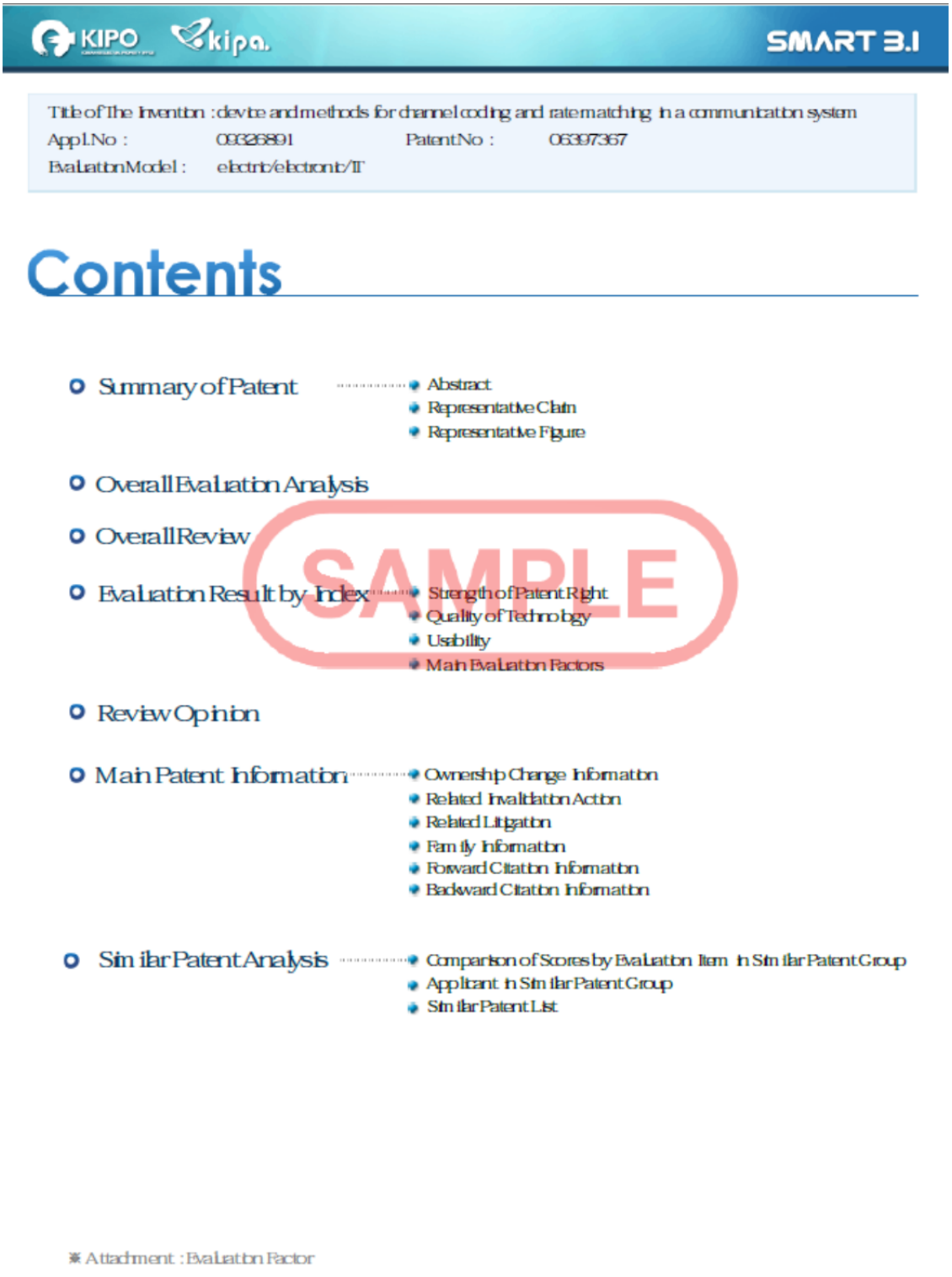
---評價報告封面：標註目標專利基本資料、評價進行日期、評價報告印製日期等相關書目資料


KIPO kipa. SMART 3.1

Title of The Invention : device and methods for channel coding and rate matching in a communication system
Appl.No : 09326891 Patent No : 06397367
Evaluation Model : electric/electronic/IT

Contents

- Summary of Patent
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※ Attachment : Evaluation Factor

---目錄頁：目標專利簡述(摘要、CLAIM、代表圖)、總體評價分析、總體評價建議、主要專利訊息、相似專利分析等章節

KIPO kipa. SMART 3.1

Title of The Invention : device and methods for channel coding and rate matching in a communication system

Appl. No : 09326891 Patent No : 0639736 7

Evaluation Model : electric/electronic/IT

Summary of Patent

- Title of the invention : device and methods for channel coding and rate matching in a communication system
- Appl. No : 09326891
- Patent No : 0639736 7
- Filing Date / Patent Date : 1999.06.07 / 2002.05.28
- Applicant : Samsung Electronics, Co., Ltd.
- Assignee : SAMSUNG ELECTRONICS CO., LTD., KOREA, REPUBLIC OF
- Inventor : Lee, Hyeon-Woo, Park, Chang-Soo
- International Patent Classification Code : H03M 013/023
- International Patent Classification Name : using convolutional codes, e.g. unit memory codes

SCORE 77.7

GRADE AAA

SAMPLE

Abstract

A channel coding device is disclosed. In the device, a bit inserter inserts known bits in an input data bit stream at predetermined positions. A channel coder codes the bit-inserted data bit stream to generate coded symbols. A rate matcher matches a rate of the coded symbols to a given channel symbol rate. A channel interleaver interleaves the rate matched channel symbols. The rate matcher includes a puncturer for puncturing the inserted known bits included in the coded symbols when the coded symbol rate is higher than the given channel symbol rate. The rate matcher includes a repeater for repeating the coded symbols to match the coded symbol rate to the given channel symbol rate when the coded symbol rate is lower than the given channel symbol rate.

Representative Claim

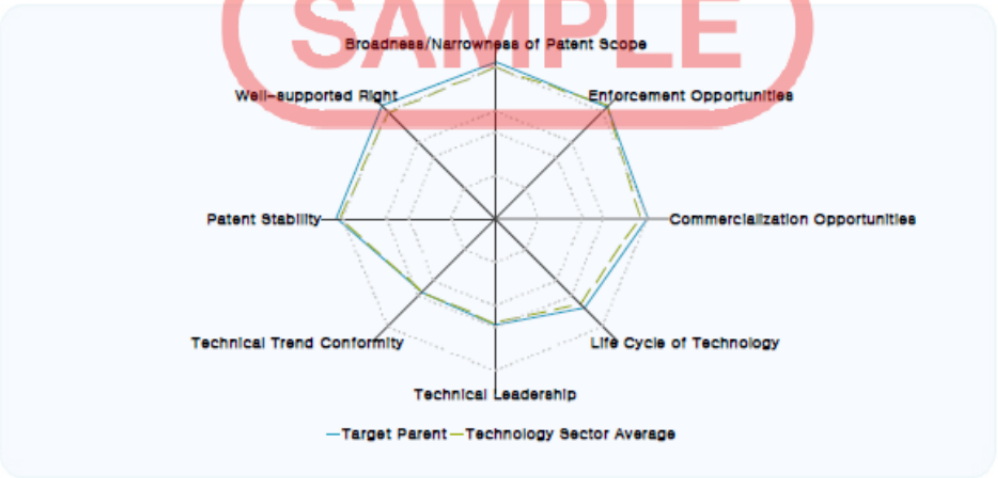
1. A channel coding device comprising: a bit inserter for inserting known bits in an input data bit stream at predetermined positions; a channel coder for coding the bit-inserted data bit stream to generate coded symbols; a rate matcher for matching a rate of the coded symbols to a given channel symbol rate; and a channel interleaver for interleaving the rate matched channel symbols.

---目標專利簡述：專利名稱、申請號、專利號、申請及公告日、申請人、所有權人、發明人、IPC 分類、專利摘要、代表請求項、以及價值等級(Grade)、價值分數(Score)

Title of The Invention : device and methods for channel coding and rate matching in a communication system
Appl.No : 09326891 Patent No : 06397367
Evaluation Model : electric/electronic/IT

Overall Evaluation Analysis

Evaluation Items	Score	Grade	Big Division (electric/electronic/IT)			Middle Division (electric/electronic/IT)			Small Division (basic communication process)		
			Percent (%)	Average	Standard Deviation	Percent (%)	Average	Standard Deviation	Percent (%)	Average	Standard Deviation
Strength of Patent Right(40)	29.1	AAA	40	24.9	2.6	40	24.9	2.6	2.6	24.9	2.5
Quality of Technology(20)	17	AAA	2.8	15.1	0.9	2.9	15.1	0.9	1.1	15.1	0.9
Usability(40)	31.6	AAA	2.9	28.4	1.7	2.9	28.4	1.7	2.1	28.4	1.5
Total(100)	77.7	AAA	1.6	68.4	3.9	1.6	68.4	3.9	0.9	68.3	3.6



※ Percentage(%) : position on percentage about rank of evaluation point in the same technical field

Overall Review

The overall evaluation score of Patent No. 06397367, "Device and methods for channel coding and rate matching in a communication system" is 77.7 point and AAA grade is assigned to it. The patent has scored 29.1 point in the Strength of Patent Right, 17.0 point in the Quality of Technology, and 31.6 point in the Usability, each of which has scored higher than the average scores of electric/electronic/IT (24.9 point in the Strength of Patent Right 15.1 point in the Quality of Technology, and 28.4 point in the Usability.) (See the table at the top). The patent is evaluated highly in the Usability, especially as 31.6 point, and comparatively low in the Quality of Technology as 17.0 point.

---整體評價分析：列出 44 項評價因子中最主要的 4 個，說明目標專利該等因子之得分與強度。

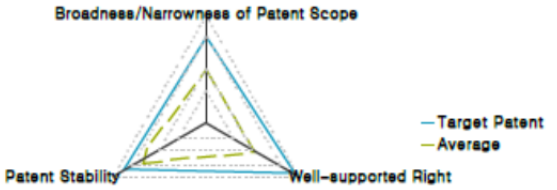
KIPO kipa SMART 3.1

Title of The Invention : device and methods for channel coding and rate matching in a communication system
Appl.No : 09326891 Patent No : 06397367
Evaluation Model : electric/electronic/IT

Evaluation Result by Index

Strength of Patent Right (40 points)

Middle Division	Score	Average
Broadness/Narrowness of Patent Scope	16.0	14.5
Well-supported Right	16.7	14.6
Patent Stability	3.7	4.2
Total	29.1	24.9

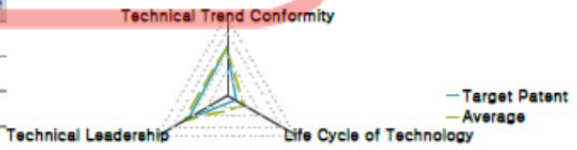


The evaluation score in the Strength of Patent Right is "29.1" and Grade "AAA" is assigned to it. The patent is evaluated highly as the evaluation scores are 16 in "Broadness/Narrowness of Patent Scope" and 16.7 in "Well-supported Right". The patent has a large number of claims (38 claims) and it has secured right on various views of technologies. Reissue was accomplished, and thus it is assumed that right scope is stronger.

* Strength of Patent Right as an evaluation factor means the degree of satisfaction in the variable characteristics (breadth of patent right, degree of completion of right, validity/ sustainability of patent right and etc.) required to be the high quality patent. Patent right having broad and multifaceted scope of protection without limitation of enforceability is normally regarded as patent right of high quality.

Quality of Technology (20 points)

Middle Division	Score	Average
Technical Trend Conformity	3.9	3.9
Technical Leadership	4.3	3.7
Life Cycle of Technology	8.8	7.5
Total	17.0	15.1

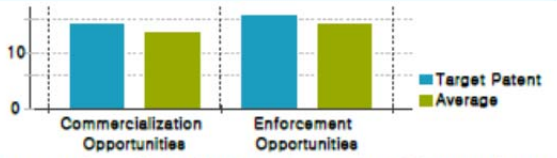


The evaluation score in the Quality of Technology is "17" and Grade "AAA" is assigned to it. The evaluation scores are 3.9 in "Technical Trend Conformity" and 4.3 in "Technical Leadership", which are comparatively high. It includes variable technical viewpoints as the number of IPC is 5. The patent has 88 forward citations in later-filed patent applications, and it has been cited in the patent application filed maximum 4978 days from the filing date of this patent.

* Quality of Technology as an evaluation factor means the degree of satisfaction in the variable characteristics required for the technologies disclosed in a patent to be in a comparatively superior position in a patent group of related technical field. It is a patent of high quality technology that technologies disclosed in the patent comply with technology trend, are in a leading position among patents of oneself or others, and are in continual use.

Usability (40 points)

Middle Division	Score	Average
Commercialization Opportunities	15.1	13.4
Enforcement Opportunities	16.5	14.9
Total	31.6	28.4



The evaluation score in the Usability is "31.6" and Grade "AAA" is assigned to it. The evaluation scores are 15.1 in "Commercialization Opportunities" and 16.5 in "Enforcement Opportunities", which are comparatively high. Reissue indicates that the patent holder desires to obtain a strong patent. it has 17 foreign family patent applications that form foreign patent network. Detailed review for determining if the closely related later filed patent has designed around the target patent is necessary, despite that the target patent was cited by the later filed patent as prior art, with there are 88 issued later filed patents. For your reference, we cannot rule out the possibility for a third party to commercialize products without infringing the target patent whose independent claims were drafted concisely, but have many claim limitations.

* Usability of patent as an evaluation factor means the degree of satisfaction in variable characteristics required for the technologies disclosed in a patent to be widely utilized. It is a patent of high usability where it is difficult for others to design around the patent scope, as a result, the patent is widely used by the patentee or third parties so that the patentee has no difficulty in enforcement.

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---說明目標專利之法律強度(40%)、品質強度(20%)以及可利用性(40%)強度之得分。

KIPO kipa. SMART 3.1

Title of The Invention : device and methods for channel coding and rate matching in a communication system
Appl.No : 09326891 Patent No : 06397367
Evaluation Model : electric/electronic/IT

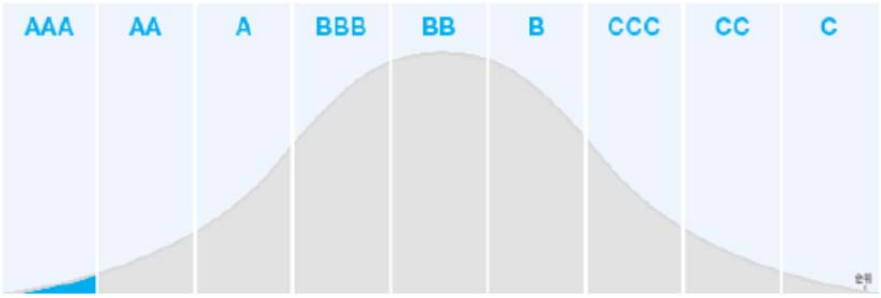
Main Evaluation Factors

Evaluation Factor	Evaluation Factor Value
Number of Independent Claim	6
Number of Dependent Claim	32
Number of family patents in the USA	2
Number of foreign family patents	17
Total number of backward citations	88

Evaluation Factor	Evaluation Factor Value
Number of IPC	5
Reexamination	0
Reissue	2
Certification of Correction	0
Litigation	0

Review Opinion

The overall evaluation score of the patent ranked in the top 1.6%, which is in AAA Grade. In detail, the score in the Strength of Patent Right ranked in the top 4% that is in AAA Grade, the score in the Quality of Technology ranked in the top 2.8% that is in AAA Grade, and the score in the Usability ranked in the top 2.9% that is in the AAA Grade. In particular, The number of forward citations is 88 and it has been cited in later-filed patent applications. It has a large number of claims (38 claims) and has secured right on various views of technologies. It has right of claims in the multiple categories.



Grade	AAA	AA	A	BBB	BB	B	CCC	CC	C
Percentage (%)	4.0%	7.0%	12.0%	17.0%	20.0%	17.0%	12.0%	7.0%	4.0%
Accumulation Rate (%)	4.0%	11.0%	23.0%	40.0%	60.0%	77.0%	89.0%	96.0%	100%

* Score-based grades are assigned based on the percentage of all registered patents according to the above grade distribution table.

---說明本次評價中所使用之主要評價因子，以及目標專利於該所屬領域(WIPO 之五大技術領域)中之價值強度分佈。

KIPO kipa SMART 3.1

Title of The Invention : devite and methods for channel coding and rate matching in a communitation system
Appl.No : 09326891 Patent No : 063973673
Evaluation Model : electric/electronic/IT

Main patent information

Ownership Change Information

No	Owner	Date of change
1	SAMSUNG ELECTRONICS CO., LTD., KOREA, REPUBLIC OF	1999.06.07

Related Invalidation Action

No	Kind	Content	Date
1	reissues	Reissue Application filed. Ex. Gp.: 2133; Re. SN.: 10/967,119	2004.10.15
2	reissues	This patent was reissued as Reissue Patent RE 41,498 (O.G. August 10, 2010)	2010.08.10

Family Information

No	Family patent number	Filing date	Country	Family type
1	WO9965148A1	1999.12.16	World Intellectual Property Organization (WIPO) (International Bureau of)	Foreign Family
2	KR10200000588A	2000.01.25	Republic of Korea	Foreign Family
3	EP1027772A1	2000.08.16	European Patent Office (EPO)	Foreign Family
4	BRPI9906479A	2000.09.26	Brazil	Foreign Family
5	CN1272252A	2000.11.01	China	Foreign Family
6	KR10033481981	2002.05.02	Republic of Korea	Foreign Family
7	US6397367B1	2002.05.28	United States of America	USA Family
8	JP2002518870A	2002.06.25	Japan	Foreign Family
9	JP2002518870T	2002.06.25	Japan	Foreign Family
10	JP3415212B2	2003.06.09	Japan	Foreign Family
11	RU2212103C2	2003.09.10	Russian Federation	Foreign Family
12	CN1148882C	2004.05.05	China	Foreign Family
13	CN1499011A	2004.05.12	China	Foreign Family
14	CN1499012A	2004.05.12	China	Foreign Family
15	DE29924886U1	2006.07.13	Germany	Foreign Family
16	CN100388810C	2007.09.19	China	Foreign Family
17	CN100466483C	2009.03.04	China	Foreign Family
18	US8014498B2	2010.08.10	United States of America	USA Family
19	BRPI9906479B1	2013.01.22	Brazil	Foreign Family

Forward Citation Information

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---說明目標專利其他主要專利訊息，如：所有權人變更紀錄、其他相關發明記錄、專利家族，以及被引用記錄...等

Title of The Invention : device and methods for channel coding and rate matching in a communication system

Appl. No : 09326891 Patent No : 06397367

Evaluation Model : electric/electronic/IT

No	Patent No	Country	Title Of The Invention	Filing Date	Applicant	Assignee
1	US6166667A	U.S.	Selection of turbo or non-turbo error correction codes based on data type or length	1999.04.05	SAMSUNG ELECTRONICS CO LTD	SAMSUNG ELECTRONICS CO. LTD., KOREA
2	US6081921A	U.S.		1997.11.20		
3	US5878085A	U.S.	Trellis coded modulation communications using pilot bits to resolve phase ambiguities	1997.08.15	STCOM, INC.	MORGAN STANLEY & CO. INCORPORATED
4	US6141363A	U.S.	Subsequent frame variable data rate indication method for various variable data rate systems	1997.03.07	OKI TELECOM	OKI TELECOM
5	US5841849A	U.S.		1996.06.25		
6	US5408518A	U.S.		1992.08.14		

Backward Citation Information

No	Patent No	Country	Title Of The Invention	Filing Date	Applicant	Assignee
1	US8566702B2	U.S.	Detection, avoidance and/or correction of problematic puncturing patterns in parity bit streams used when implementing turbo codes	2011.12.02	NTHDIGITAL TECHNOLOGY	NTHDIGITAL TECHNOLOGY
2	WO2012036754A1	World Intellectual Property Organization (WIPO) (International Bureau of)		2011.02.14		
3	US8406322B2	U.S.	Method for matching rate in mobile communication system	2010.07.21	LG ELECTRONICS INC.	LG INFORMATION & COMMUNICATIONS, LTD
4	US20100309977A1	U.S.		2010.06.18		
5	US7899016B2	U.S.	Physical layer processing for a wireless communication system using code division multiple access	2010.04.12	NTHDIGITAL TECHNOLOGY	NTHDIGITAL TECHNOLOGY
6	US7848410B2	U.S.	Systems and methods for decreasing latency in a digital transmission system	2010.02.25	XOCYST TRANSFER AG L.L.C.	INTELLECTUAL VENTURES I, LLC (A DELAWARE LIMITED LIABILITY COMPANY)
7	US8107548B2	U.S.	Digital broadcast transmitting/receiving system having an improved receiving performance and signal processing method thereof	2009.10.01	SAMSUNG ELECTRONICS CO., LTD.	SAMSUNG ELECTRONICS CO., LTD.
8	US8103347B2	U.S.	Digital broadcast transmitting/receiving system having an improved receiving performance and signal processing method thereof	2009.10.01	SAMSUNG ELECTRONICS CO., LTD.	SAMSUNG ELECTRONICS CO., LTD.
9	US8190433B2	U.S.	Digital broadcast transmitting/receiving system having an improved receiving performance and signal processing method thereof	2009.10.01	SAMSUNG ELECTRONICS CO., LTD.	SAMSUNG ELECTRONICS CO., LTD.
10	US7580651B2	U.S.	Joint symbol, amplitude, and rate estimator	2009.06.25	BAE SYSTEMS INFORMATION AND ELECTRONICS SYSTEMS INTEGRATION, INC	COLLISION COMMUNICATIONS, INC., NEW HAMPSHIRE
11	US7627066B2	U.S.	Rate matching method in mobile communication system	2009.03.06	LG ELECTRONICS INC.	LG ELECTRONICS INC.
12	US7814390B2	U.S.	Rate matching method in mobile communication system	2009.03.06	LG ELECTRONICS INC.	LG ELECTRONICS INC.
13	US7814391B2	U.S.	Rate matching method in mobile communication system	2009.03.06	LG ELECTRONICS INC.	LG ELECTRONICS INC.
14	US7639748B2	U.S.	Physical layer processing for a wireless communication system using code division multiple access	2009.01.15	NTHDIGITAL TECHNOLOGY	NTHDIGITAL TECHNOLOGY
15	US7590201B2	U.S.	Joint symbol, amplitude, and rate estimator	2008.10.15	BAE SYSTEMS INFORMATION & ELECTRONIC SYSTEMS INTEGRATION, INC.	COLLISION COMMUNICATIONS, INC., NEW HAMPSHIRE

Title of The Invention : device and methods for channel coding and rate matching in a communication system
Appl. No : 09326891 Patent No : 063973657
Evaluation Model : electric/electronic/IT

No	Patent No	Country	Title Of The Invention	Filing Date	Applicant	Assignee
16	US7583757B2	U.S.	Joint symbol, amplitude, and rate estimator	2008.10.15	BAE SYSTEMS INFORMATION & ELECTRONIC SYSTEMS INTEGRATION, INC.	COLLISION COMMUNICATIONS, INC., NEW HAMPSHIRE
17	US2010283169A1	U.S.		2008.08.22		
18	US7590187B2	U.S.	Digital broadcasting transmission and/or reception system to improve receiving performance and signal processing method thereof	2008.07.18	SAMSUNG ELECTRONICS CO., LTD.	SAMSUNG ELECTRONICS CO., LTD.
19	US8041753B2	U.S.	Method for matching rate in mobile communication system	2008.06.03	LG ELECTRONICS, INC.	LG ELECTRONICS, INC.
20	US2008/0084843A1	U.S.		2008.04.25		
21	US8073016B2	U.S.	Apparatus and method for channel coding and multiplexing in CDMA communication system	2008.04.22	SAMSUNG ELECTRONICS CO., LTD	SAMSUNG ELECTRONICS CO., LTD
22	US8041530B2	U.S.	Method for matching rate in mobile communication system	2008.03.31	LG ELECTRONICS, INC.	LG ELECTRONICS, INC.
23	US8347188B2	U.S.	Error correction methods and apparatus for mobile broadcast services	2008.02.27	SPREADTRUM COMMUNICATION CO., LTD.	SPREADTRUM COMMUNICATIONS CO., LTD.
24	US8064425B2	U.S.	Method and apparatus for transmitting data frames, and a method and apparatus for data rate matching	2007.12.13	SIEMENS AKTIENGESELLSCHAFT	SIEMENS AKTIENGESELLSCHAFT
25	WO2008/096967A1	World Intellectual Property Organization (WIPO) (International Bureau of)		2007.11.01		
26	US8111621B2	U.S.	Method for configuring a telecommunication system	2007.10.30	RESEARCH IN MOTION	RESEARCH IN MOTION
27	US7839864B2	U.S.	Communication method and apparatus and base station	2007.10.30	MITSUBISHI ELECTRIC	RESEARCH IN MOTION
28	US7864680B2	U.S.	Communication apparatus and method	2007.10.30	MITSUBISHI ELECTRIC	RESEARCH IN MOTION
29	WO2008/053007A1	World Intellectual Property Organization (WIPO) (International Bureau of)		2007.10.19		
30	US8074143B2	U.S.	Detection, avoidance and/or correction of problematic puncturing patterns in parity bit streams used when implementing turbo codes	2007.10.12	INTRODIGITAL TECHNOLOGY	INTRODIGITAL TECHNOLOGY
31	US8223864B2	U.S.	Method and apparatus for transmission of uplink control signaling and user data in a single carrier orthogonal frequency division multiplexing communication system	2007.09.25	MOTOROLA MOBILITY, INC	MOTOROLA MOBILITY, INC
32	US7941722B2	U.S.	Method and apparatus for de-rate matching in communication system	2007.08.10	ELECTRONICS & TELECOMMUNICATIONS RESEARCH INSTITUTE	ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTIT
33	US8074159B2	U.S.	Tail-biting turbo coding to accommodate any information and/or interleaver block size	2007.07.30	BROADCOM	BROADCOM
34	US7584406B2	U.S.	Rate matching apparatus, systems, and methods	2007.07.12	INTEL CORP	INTEL CORP
35	US8332734B2	U.S.	Rate matching device and method for a date communication system	2007.05.14	SAMSUNG ELECTRONICS CO., LTD	SAMSUNG ELECTRONICS CO., LTD
36	US7987414B2	U.S.	Rate matching device and method for a data communication system	2007.05.14	SAMSUNG ELECTRONICS CO., LTD	SAMSUNG ELECTRONICS CO., LTD
37	US8132072B2	U.S.	Apparatus and method for improving turbo code performance in a communication system	2006.10.12	SAMSUNG ELECTRONICS CO., LTD	SAMSUNG ELECTRONICS CO. LTD., KOREA

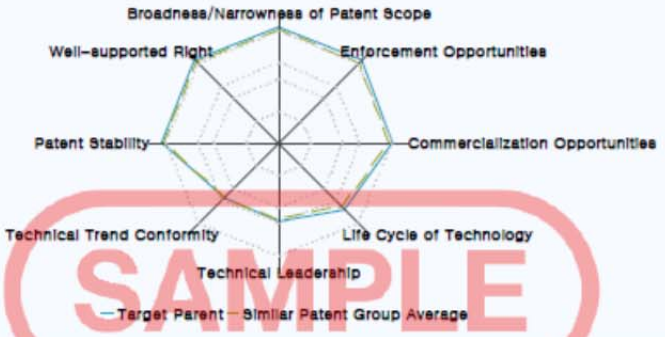
Title of The Invention : device and methods for channel coding and rate matching in a communication system
Appl. No : 03326891 Patent No : 063973367
Evaluation Model : electric/electronic/IT

No	Patent No	Country	Title Of The Invention	Filing Date	Applicant	Assignee
38	US8019011B2	U.S.	Digital broadcast transmitting/receiving system having an improved receiving performance and signal processing method thereof	2006.07.12	SAMSUNG ELECTRONICS CO., LTD.	SAMSUNG ELECTRONICS CO., LTD.
39	US7627803B2	U.S.	System and method for variable forward error correction (FEC) protection	2006.07.05	HARRIS CORP	HARRIS CORP
40	US7712012B2	U.S.	Method of configuring transmission in mobile communication system	2006.06.29	LG ELECTRONICS INC.	LG ELECTRONICS INC., KOREA
41	US8271868B2	U.S.	Method of decoding code blocks and system for concatenating code blocks	2006.04.06	ALCATEL LUCENT	CREDIT SUISSE AG
42	US8116196B2	U.S.	Method for configuring a telecommunication system	2005.10.04	RESEARCH IN MOTION	RESEARCH IN MOTION
43	US7636878B2	U.S.	Method of configuring transmission in mobile communication system	2005.09.22	LG ELECTRONICS INC.	LG ELECTRONICS INC.
44	US7889623B2	U.S.	Systems and methods for decreasing latency in a digital transmission system	2005.08.12	HEDBERG DAVID	INTELLECTUAL VENTURES I, LLC LIMITED LIABILITY COMPANY
45	US7590931B2	U.S.	Reduced complexity error correction encoding techniques	2005.08.05	HITACHI GLOBAL STORAGE TECHNOLOGIES NETHERLANDS, B.V.	HGST NETHERLANDS B.V.
46	US7773518B2	U.S.	Method for configuring a telecommunication system	2005.07.25	MITSUBISHI ELECTRIC	RESEARCH IN MOTION
47	US7773684B2	U.S.	Digital broadcasting transmission and/or reception system to improve receiving performance and signal processing method thereof	2005.05.01	SAMSUNG ELECTRONICS CO., LTD.	SAMSUNG ELECTRONICS CO. LTD., KOREA
48	US7593474B2	U.S.	Digital broadcast transmitting/receiving system having an improved receiving performance and signal processing method thereof	2005.01.10	SAMSUNG ELECTRONICS CO., LTD.	SAMSUNG ELECTRONICS CO. LTD., KOREA
49	US6131398B2	U.S.	Hierarchical trellis coded modulation	2004.10.22	KANOS COMMUNICATIONS	KANOS COMMUNICATIONS
50	US7421111B2	U.S.	System and method of applying parity bits to protect transmitting and receiving data	2004.08.17	SUNPLUS TECHNOLOGY CO LTD.	SUNPLUS TECHNOLOGY CO LTD.

Title of The Invention : devite and methods for channel coding and rate matching in a communitation system
Appl.No : 09326891 Patent No : 06397367
Evaluation Model : electri/electronic/IT

Similar Patent Analysis

Comparison of Scores by Evaluation Item in Similar Patent Group



	Target Patent	Average	Deviation
Total	77.7	70.7	3.9
Strength of Patent Right	29.1	26.5	2.6
Quality of Technology	17.0	15.0	0.9
Usability	31.6	29.1	1.6

Applicant in Similar Patent Group

Similar Patent Applicant List

Applicant	No. Similar Patent	Possession Rate(%)
SAMSUNG ELECTRONICS CO., LTD.	11	11.0
QUALCOMM INCORPORATED	9	9.0
DIGITAL FOUNTAIN, INC.	7	7.0
Samsung Electronics Co., Ltd	5	5.0
ARUZE GAMING AMERICA, INC.	2	2.0
Apple Computer, Inc.	2	2.0
Apple Inc.	2	2.0
Electronics and Telecommunications Research Institute	2	2.0
Indian Institute of Science	2	2.0

---其他相似專利分析，以及該等相似專利所有權人列表

Title of The Invention : device and methods for channel coding and rate matching in a communication system
App l.No : 09326891 Patent No : 06397367
Evaluation Model : electric/electronic/IT

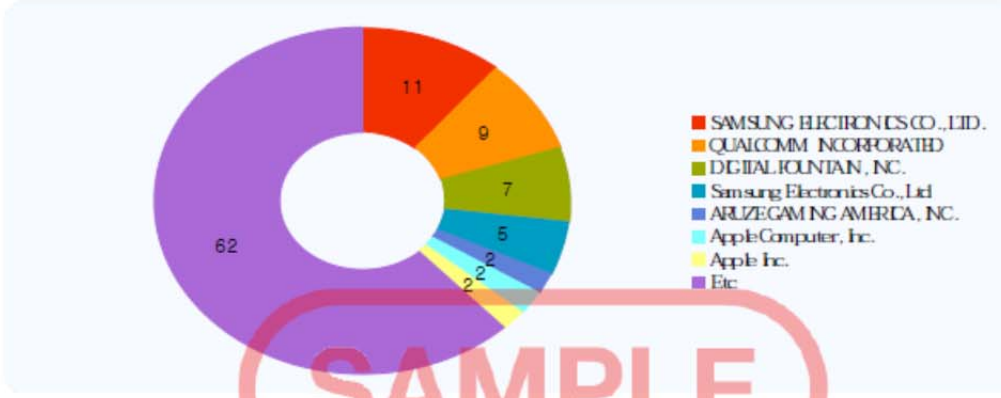
Applicant	No. Similar Patent	Possession Rate(%)
Intel Corporation	2	20
LG Electronics Inc.	2	20
Qualcomm , Incorporated	2	20
Telefonaktiebolaget LM Ericsson (publ)	2	20
Universal Entertainment Corporation	2	20
Aristocrat Technologies Australia Pty Limited	1	10
Board of Trustees of the Leland Stanford Junior University	1	10
Broadcom Corporation	1	10
CORTINA SYSTEMS, INC.	1	10
Digital Fountain Inc.	1	10
EDWARDS PAUL	1	10
GOLITSCHEK EDLER VON ELBWART A	1	10
General Instrument Corporation of Delaware	1	10
HAMAMOTO KATSUAKI	1	10
HALSKE FABIAN NIKOLAUS	1	10
Hewlett-Packard Development Company, L.P.	1	10
Hitachi Global Storage Technologies Netherlands B.V.	1	10
Hitachi, Ltd.	1	10
IGT	1	10
INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE	1	10
InterDigital Technology Corporation	1	10
Interactive Silicon, Inc.	1	10
International Business Machine Corporation	1	10
KONINKLIJKE PHILIPS ELECTRONICS N.V.	1	10
Korean Advanced Institute of Science & Technology	1	10
LIN HSIEN-CHUNG	1	10
Lucent Technologies Inc.	1	10
MATSUMURA YOSHINOBU	1	10
Matsushita Electric Industrial Co., Ltd.	1	10
Micronas Semiconductors, Inc.	1	10
Microsoft Corporation	1	10
Mitsubishi Electric Corporation	1	10
Motorola, Inc.	1	10
Next Level Communications, Inc.	1	10
Nokia Corporation	1	10
Nokia Siemens Networks Oy	1	10
PANASONIC CORPORATION	1	10
PANTECH WIRELESS, INC.	1	10

Title of The Invention : device and methods for channel coding and rate matching in a communication system
Appl. No : 03826891 Patent No : 0639736 7
Evaluation Model : electric/electronic/IT

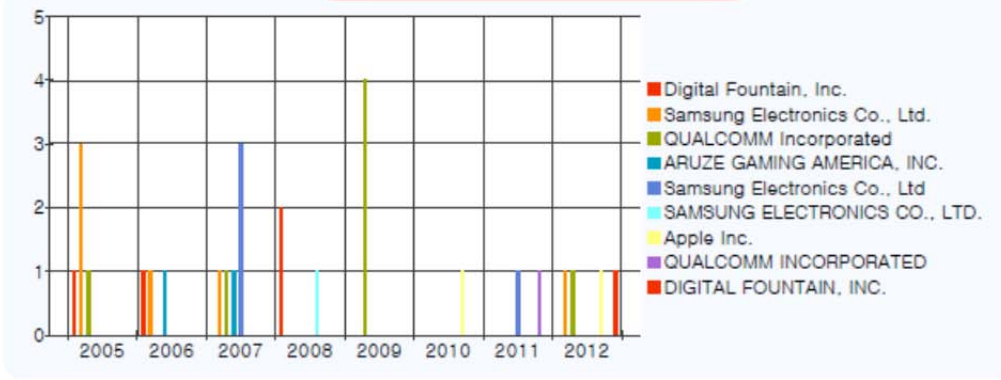
Applicant	No. Similar Patent	Possession Rate(%)
QUANTA I	1	1.0
RAAF BERNHARD	1	1.0
SHOKROLLAHI M AMIN	1	1.0
STEWART KENNETH A	1	1.0
STM icroelectronics SA	1	1.0
Samsung Electronics, Co., Ltd.	1	1.0
Silicon Image	1	1.0
Skyworks Solutions, Inc.	1	1.0
Sun Microsystems, Inc.	1	1.0
TAO OLME	1	1.0
Thomson Licensing	1	1.0
U.S. Philips Corporation	1	1.0
Valens Semiconductor Ltd.	1	1.0
Vitesse Semiconductor Corporation	1	1.0
YAZAKI CORPORATION	1	1.0
Total	100	100%

Title of The Invention : device and methods for channel coding and rate matching in a communication system
Appl. No : 03326891 Patent No : 06397367
Evaluation Model : electric/electronic/IT

Applicant Distribution



Similar Patent Application Trend by Applicant and Yearly



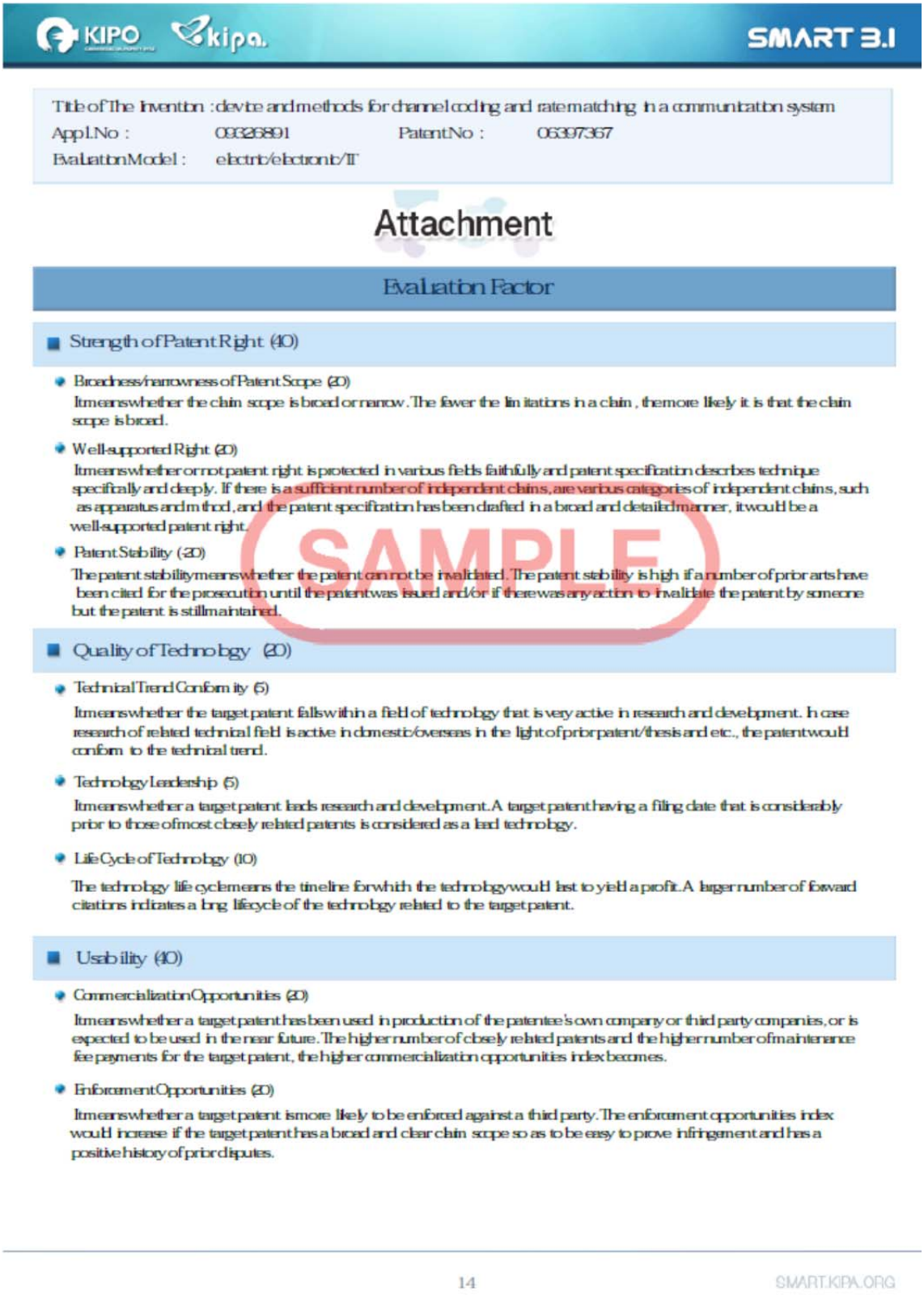
Registration of patents in the technical field closely related to the target patent began from 1996 year, and it is still increasing. Samsung Electronics, Co., Ltd. occupies 9% in the similar patent and it has little influence with the related technical field.

Title of The Invention : device and methods for channel coding and rate matching in a communication system
Appl. No : 09326891 Patent No : 06397367
Evaluation Model : electric/electronic/IT

Similar Patent List

No	Appl. No	Title of The Invention	Relevance Score	Applicant	Type
1	10967119	Device and methods for channel coding and rate matching in a communication system	1197	Samsung Electronics Co., Ltd.	Issued Patent
2	11020768	Channel coding method and device	460	SAMSUNG ELECTRONICS CO., LTD.	Publication
3	12435120	Method and system for symbol detection using sub-constellations	362	Qualcomm Incorporated	Issued Patent
4	09126664	Apparatus and methods for puncturing and recovering code in spread spectrum communication system	361	Samsung Electronics Co., Ltd.	Issued Patent
5	12451205	Data modulation in a communication system	314	Nokia Siemens Networks Oy	Issued Patent
6	11626522	Apparatus and method of dynamically caching symbols to manage a dictionary in a text image coding and decoding system	285	Samsung Electronics Co., Ltd.	Issued Patent
7	13766510	GAMING SYSTEM AND METHOD OF GAMING	265	Aristocrat Technologies Australia Pty Limited	Publication
8	09476436	Device and method for convolutional encoding in digital system	264	Samsung Electronics, Co., Ltd.	Issued Patent
9	13254954	OFDM TRANSMITTER DEVICE, OFDM TRANSMISSION METHOD, OFDM RECEIVER DEVICE, AND OFDM RECEPTION METHOD	257	MATSUMURA YOSHINOBU	Publication
10	11649685	Apparatus and method for symbol mapping TFCI bits for a hard split mode in a CDMA mobile communication system	246	Samsung Electronics Co., Ltd.	Issued Patent
11	10190645	Apparatus and method for symbol mapping TFCI bits for a hard split mode in a CDMA mobile communication system	243	Samsung Electronics Co., Ltd.	Issued Patent
12	10741184	Method and apparatus for puncturing code symbols in a communications system	243	QUALCOMM Incorporated	Issued Patent
13	11295119	Method for generating codeword using repetition	237	Samsung Electronics Co., Ltd.	Issued Patent
14	10915701	Data transmission method and receiver	235	Nokia Corporation	Issued Patent
15	13388865	METHODS AND APPARATUS FOR LOW COMPLEXITY SOFT-INPUT SOFT-OUTPUT GROUP DETECTION	234	QUALCOMM INCORPORATED	Publication
16	12252331	ERROR CORRECTING MULTI-STAGE CODE GENERATOR AND DECODER FOR COMMUNICATION SYSTEMS HAVING SINGLE TRANSMITTERS OR MULTIPLE TRANSMITTERS	234	Digital Fountain, Inc.	Publication
17	10374846	System and method for replacing bitstream symbols with intermediate symbols	225	TAO OLIVE	Publication
18	09780497	Vehicle compartment radio LAN system	219	YAZAKI CORPORATION	Publication
19	10112401	Apparatus and method for efficiently distributing energy over a packet data channel in a mobile communication system for high rate packet transmission	217	Samsung Electronics Co., Ltd.	Issued Patent
20	11641613	Method for ciphering data with error correction code	216	STMicroelectronics SA	Issued Patent

※ Similarity Distribution of overall patent : Average (228.18), Median (201), Maximum (1527)
※ Similarity Distribution of 100 Similar Patents : Average (216.4), Median (193.5), Maximum (1197.0)



KIPO kipa. SMART 3.1

Title of The Invention : device and methods for channel coding and rate matching in a communication system

Appl.No : 09326891 Patent No : 06397367

Evaluation Model : electric/electronic/IT

Attachment

Evaluation Factor

Strength of Patent Right (40)

- Broadness/narrowness of Patent Scope (20)

  It means whether the claim scope is broad or narrow. The fewer the limitations in a claim, the more likely it is that the claim scope is broad.

- Well-supported Right (20)

  It means whether or not patent right is protected in various fields faithfully and patent specification describes technique specifically and deeply. If there is a sufficient number of independent claims, are various categories of independent claims, such as apparatus and method, and the patent specification has been drafted in a broad and detailed manner, it would be a well-supported patent right.

- Patent Stability (-20)

  The patent stability means whether the patent can not be invalidated. The patent stability is high if a number of prior arts have been cited for the prosecution until the patent was issued and/or if there was any action to invalidate the patent by someone but the patent is still maintained.

Quality of Technology (20)

- Technical Trend Conformity (5)

  It means whether the target patent falls within a field of technology that is very active in research and development. In case research of related technical field is active in domestic/overseas in the light of prior patent/thesis and etc., the patent would conform to the technical trend.

- Technology Leadership (5)

  It means whether a target patent leads research and development. A target patent having a filing date that is considerably prior to those of most closely related patents is considered as a lead technology.

- Life Cycle of Technology (10)

  The technology life cycle means the time line for which the technology would last to yield a profit. A larger number of forward citations indicates a long lifecycle of the technology related to the target patent.

Usability (40)

- Commercialization Opportunities (20)

  It means whether a target patent has been used in production of the patentee's own company or third party companies, or is expected to be used in the near future. The higher number of closely related patents and the higher number of maintenance fee payments for the target patent, the higher commercialization opportunities index becomes.

- Enforcement Opportunities (20)

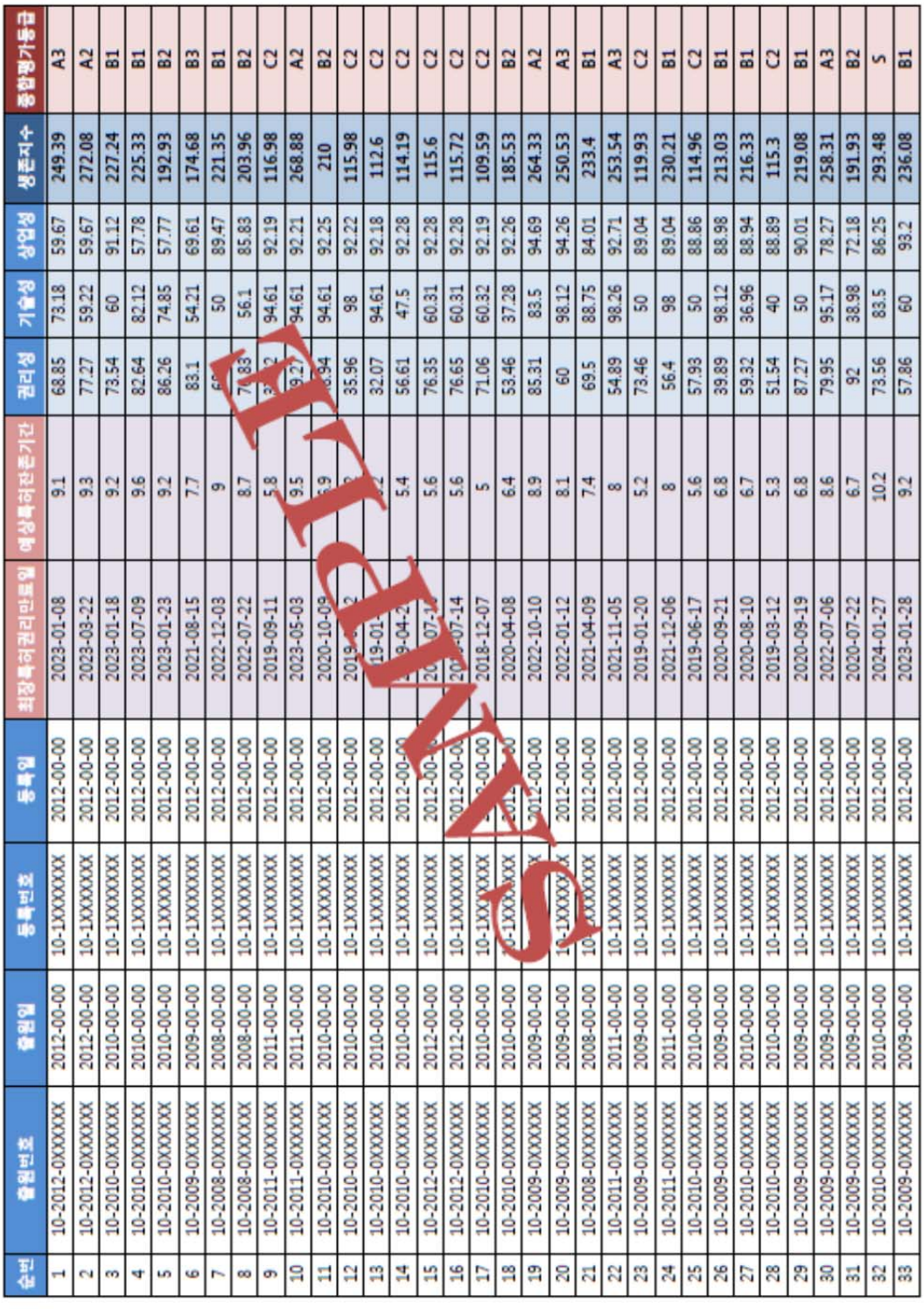
  It means whether a target patent is more likely to be enforced against a third party. The enforcement opportunities index would increase if the target patent has a broad and clear claim scope so as to be easy to prove infringement and has a positive history of prior disputes.

14 SMART.KIPA.ORG

---附錄：說明評價中所使用的法律強度、技術品質以及可利用性之主要評價概念和評價重心。

二、PIPC K-PEG 系統評價報告範例

1.簡易版報告(價值表)



순번	출원등록번호	출원일	등록번호	등록일	최장특허권리만료일	특허잔존기간	권리성	기술성	상업성	생존지수	종합평가등급
1	10-2012-0XXXXXX	2012-00-00	10-1XXXXXX	2012-00-00	2023-01-08	9.1	68.85	73.18	59.67	249.39	A3
2	10-2012-0XXXXXX	2012-00-00	10-1XXXXXX	2012-00-00	2023-03-22	9.3	77.27	59.22	59.67	272.08	A2
3	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	2023-01-18	9.2	73.54	60	91.12	227.24	B1
4	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	2023-07-09	9.6	82.64	82.12	57.78	225.33	B1
5	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	2023-01-23	9.2	86.26	74.85	57.77	192.93	B2
6	10-2009-0XXXXXX	2009-00-00	10-1XXXXXX	2012-00-00	2021-08-15	7.7	83.1	54.21	69.61	174.68	B3
7	10-2008-0XXXXXX	2008-00-00	10-1XXXXXX	2012-00-00	2022-12-03	9	6[illegible]	50	89.47	221.35	B1
8	10-2008-0XXXXXX	2008-00-00	10-1XXXXXX	2012-00-00	2022-07-22	8.7	7[illegible]83	56.1	85.83	203.96	B2
9	10-2011-0XXXXXX	2011-00-00	10-1XXXXXX	2012-00-00	2019-09-11	5.8	3[illegible]2	94.61	92.19	116.98	C2
10	10-2011-0XXXXXX	2011-00-00	10-1XXXXXX	2012-00-00	2023-05-03	9.5	9[illegible]27	94.61	92.21	268.88	A2
11	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	2020-10-08	6.9	8[illegible]94	94.61	92.25	210	B2
12	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	2019-[illegible]2	[illegible]	35.96	98	92.22	115.98	C2
13	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	19-01-[illegible]	[illegible]2	32.07	94.61	92.18	112.6	C2
14	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	19-04-2[illegible]	5.4	56.61	47.5	92.28	114.19	C2
15	10-2012-0XXXXXX	2012-00-00	10-1XXXXXX	2012-00-00	20[illegible]07-1[illegible]	5.6	76.35	60.31	92.28	115.6	C2
16	10-2012-0XXXXXX	2012-00-00	10-1XXXXXX	2012-00-00	20[illegible]07-14	5.6	76.65	60.31	92.28	115.72	C2
17	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	2018-12-07	5	71.06	60.32	92.19	109.59	C2
18	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	2020-04-08	6.4	53.46	37.28	92.26	185.53	B2
19	10-2009-0XXXXXX	2009-00-00	10-1XXXXXX	2012-00-00	2022-10-10	8.9	85.31	83.5	94.69	264.33	A2
20	10-2009-0XXXXXX	2009-00-00	10-1XXXXXX	2012-00-00	2022-01-12	8.1	60	98.12	94.26	250.53	A3
21	10-2008-0XXXXXX	2008-00-00	10-1XXXXXX	2012-00-00	2021-04-09	7.4	69.5	88.75	84.01	233.4	B1
22	10-2011-0XXXXXX	2011-00-00	10-1XXXXXX	2012-00-00	2021-11-05	8	54.89	98.26	92.71	253.54	A3
23	10-2009-0XXXXXX	2009-00-00	10-1XXXXXX	2012-00-00	2019-01-20	5.2	73.46	50	89.04	119.93	C2
24	10-2011-0XXXXXX	2011-00-00	10-1XXXXXX	2012-00-00	2021-12-06	8	56.4	98	89.04	230.21	B1
25	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	2019-06-17	5.6	57.93	50	88.86	114.96	C2
26	10-2009-0XXXXXX	2009-00-00	10-1XXXXXX	2012-00-00	2020-09-21	6.8	39.89	98.12	88.98	213.03	B1
27	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	2020-08-10	6.7	59.32	36.96	88.94	216.33	B1
28	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	2019-03-12	5.3	51.54	40	88.89	115.3	C2
29	10-2009-0XXXXXX	2009-00-00	10-1XXXXXX	2012-00-00	2020-09-19	6.8	87.27	50	90.01	219.08	B1
30	10-2009-0XXXXXX	2009-00-00	10-1XXXXXX	2012-00-00	2022-07-06	8.6	79.95	95.17	78.27	258.31	A3
31	10-2009-0XXXXXX	2009-00-00	10-1XXXXXX	2012-00-00	2020-07-22	6.7	92	38.98	72.18	191.93	B2
32	10-2010-0XXXXXX	2010-00-00	10-1XXXXXX	2012-00-00	2024-01-27	10.2	73.56	83.5	86.25	293.48	S
33	10-2009-0XXXXXX	2009-00-00	10-1XXXXXX	2012-00-00	2023-01-28	9.2	57.86	60	93.2	236.08	B1

2.摘要版報告

121-816 서울시 마포구 동교동 146-8(연희로 404) | (02)6915-6000 | FAX : (02) 6915-6050

Korea Institute of Patent Information
Patent Information Promotion Center

Data updated on : 2013-05-15

PATENT VALUATION REPORT

한국특허평가보고서

K-PEG 2.1
KIPI Patent Evaluation & Grading

REPORT DATE 2013-05-23
Patent Number : XXXXXXXXX
Filed Date : 2012-01-13

Assignee : XXXXXXXXX

이 보고서는 한국특허정보원의 특허평가시스템(K-PEG)으로 산출된 것입니다. 이 보고서의 모든 점수와 등급은 통계적 방식에 근거하고, 공개적으로 활용 가능한 데이터를 기본으로 계산되었습니다. 이 보고서는 관련 기술분야의 전문가의 법률적인 견해나 기술적 의견 및 특정 정보를 바탕으로 작성된 것이 아닙니다. 이 보고서에서 제공하는 특허생존지수(PSI) 및 종합평가등급은 특허평가를 위한 정량지표로서 사용됩니다. 이 보고서는 시장가치, 로열티, 무효, 심판, 침해 등과의 **법적인 관계가 없으며**, 따라서 이러한 내용을 입증하는 자료로 활용되어서는 아니 됩니다. 이 보고서와 보고서에 포함되어 있는 정보는 한국특허정보원이 제공하는 범위 내에서 완전하고 정확한 것입니다. 그러나 한국특허정보원은 이 보고서에 포함된 정보가 어떤 특정 목적과 관련해서 완전하고 정확하다는 것을 **보증하거나 대변하지 않습니다**. 여러분이 이 보고서에 포함된 정보를 가지고 어떤 행동을 실행하기 전에, 법률 또는 재정전문가와 상담할 필요가 있습니다.

한국특허정보원
특허정보진흥센터

www.kpeg.or.kr www.pipc.or.kr www.kiwee.or.kr www.kipi.or.kr

KIPI PIPC K-PEG

발명의 명칭: XXXXXXXXXXXXXXXXXXXXXXXXXXXX

출원번호: 10-2012-XXXXXXXX
출원일: 2012-01-13

등록번호: KR XXXXXXXXXXXXXXX
등록일: 2013-04-11

기술분야: 전기통신기술
국제특허분류: H04B11/00 | H04B13/00

발명자: 홍길동

특허권자: XXXXXXXXXX

REPORT DATE: 2013-05-13

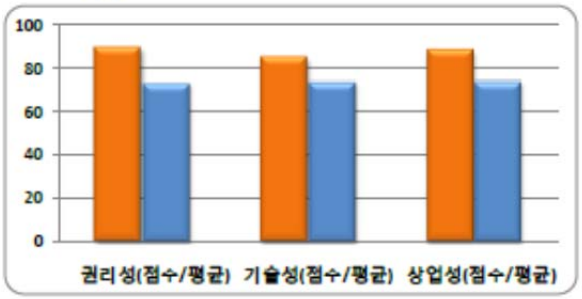
특허생존지수(PSI) 및 평가등급 요약

특허생존지수(PSI) : 294.02
종합평가등급: S
평가등급 상위: 5.0%
예상 특허소멸시점: 2025-06-30
예상 특허잔존기간: 12.1 Years.
최장특허권리만료일 2032-01-13

특허생존지수 / 평균생존
종합평가등급

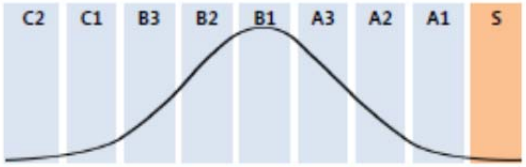
294.02 219.1

S



대분류	대분류별 평가지수	평가지수 MAX
권리성 지수	89.37	100
기술성 지수	84.84	100
상업성 지수	88.21	100

정규분포도 및 배분율



등급	C2	C1	B3	B2	B1	A3	A2	A1	S
배분율(%)	5.0%	7.5%	10.0%	15.0%	25.0%	15.0%	10.0%	7.5%	5.0%
누적비율(%)	100.0%	95.0%	87.5%	77.5%	62.5%	37.5%	22.5%	12.5%	5.0%

세부항목별 평가지수

대분류[3]	대분류별 평가지수	중분류[3]	중분류별 평가지수
권리성	89.4	청구항 수	75
		청구범위	90.3
		권리의 변동성	92.34
기술성	84.8	기술의 완전성	95.32
		기술의 협력도	88.34
		국제협력도(연구)	79.88
		기술의 융합도	89.34
상업성	88.2	국제협력도(권리)	95.32
		특허점유도	90.56
		활용성	83.96
		지역확장성	80.66

KR XXXXXXXXXX

※ 본 예상특허소멸시점은 특허심사기간 등의 차이로 인하여 2~4년 정도의 오차가 있을 수 있으며, 통계에 의한 예측값에 불과합니다.

I APPENDIX

K-PEG 평가시스템 이란?

특허평가시스템은 한국특허정보원의 독자적인 평가모델로 고객의 무형자산을 객관적으로 평가하고 스마트한 경영전략을 지원합니다. 데이터마이닝 기법을 적용하여 특허유지율과 관련된 평가항목을 도출하고, 특허 생존율에 대한 통계적 확률값을 계산해서 특허생존지수 및 평가등급을 부여합니다.

K-PEG 2.1 평가시스템의 특징?

대량의 특허를 빠른 시간내에 선별평가 할 수 있습니다.
데이터마이닝 기법을 이용하여 평가대상 기술과 관련성이 높은 기술분야를 추출하고, 특허평가결과 예측의 정확도를 향상시키도록 설계되어 있습니다.
한국특허평가에서는 기술분야에 따라 8가지 평가모델을 가지고 있으며,
미국특허평가에서는 기술분야에 따라 50여 가지의 평가모델을 구축하여 평가결과에 대한 신뢰성을 높였습니다.

K-PEG 평가서비스연혁

연 혁	주 진 경 과
2005년	특허기술평가모델 개발 기본계획 수립, 해외 서비스 사례조사(OceanTomo, IPR 등), 관련 기초논문 등) 분석
2006년	데이터마이닝 기반구축 (평가스 분석시스템 개발 등), 통계 DB Cleansing
2007년	평가항목 모델링(평가항목 검증 및 가중치 조정), 특허기술평가관련 특허출원 (출원번호: 10-2007-0034113)
2007년 9월	평가시스템 검증 (3.1 검증(마케사), 학술적 검증(서울대 외), **한국특허평가시스템 launching (K-PEG 1.0)**
2007년	"특허청, 특허기술경제에 K-PEG을 이용하여 우수특허 선별작업에 공정성과 객관성부여" (보도자료내용: 2007.11)
2008년	국내 최초 실시간 온라인 특허평가서비스 런칭 (2008.01)
2009년	자체 개발한 K-PEG1.0 특허평가기술을 발명진흥협회 무상지원
2009년	K-PEG 평가스템 특허취득(제10-0899754, 2009.05.20), 특허생존기간을 확률로 예측하는 모델링 작업
2010년	국내 최초 특허평가 시스템 개발 (K-PEG 2.0), IEEE 논문발표(ITCS 2010. 5581383 -모델링 검증 (2010.08)
2011년	한국과 미국특허평가 서비스 K-PEG 2.0 launching(2011.01), 특허논문발표 TCE vol14 -모델링 정밀론 개선 (2011.06)
2013년	K-PEG 2.1 launching (전문가용 평가분석보고서를 포함한 한국/미국 총 8종류 보고서 및 정량분석tool 개발)

K-PEG의 Update 주기 : 1주일 단위로 자동업데이트

K-PEG 2.1는 매주 자동으로 업데이트를 실시합니다.
평가된 전체 등록특허를 1주일 단위로 모두 새롭게 재평가하여 그 값을 산출하게 됩니다. 따라서 보고서의 첫페이지에 있는 Data update on과 REPORT DATE는 매우 중요합니다. 동일한 특허라 할지라도 평가되는 시점에 따라 그 평가값이 달라질 수 있습니다.

K-PEG의 정확도

K-PEG 2.1는 85% 이상의 평가정확도를 가지며, 이 데이터는 주관적인 평가결과 값이 아니며, 소멸된 특허를 K-PEG 평가모델을 이용하여 생존지수를 산출하고, 이를 특허의 실질 생존기간과 비교한 결과값으로 그 객관성이 보장됩니다. 또한 상기 평가모델은 특허정보원이 자체 개발한 평가모델로 IEEE의 연구논문에 발표되어 그 신뢰성을 인정받았습니다

평가항목	전체특허 정확도	기술별 정확도
한국 K-PEG 결과	85.64%	86.03%
미국 K-PEG 결과	86.05%	86.35%

특허생존지수 (Patent Survival Index, PSI)

특허 생존지수(PSI)는 가치 있는 특허는 생존가능 확률이 높은 특허로 규정하고, 특허의 생존으로 특허권자에게 새로운 부가가치를 창출한다는 가설을 근거로 이와 관련된 평가요소를 도출하고, 통계적인 방식으로 기술분야별 평가모델을 설계하였습니다. 수차례의 통계적 검증을 통해 정량평가가 이루어질 수 있도록 지수 개념을 도입하였습니다. 특허생존지수의 최대값은 300점입니다. 생존지수가 높을수록 특허권리가 오래 유지될 확률이 높으며, 이를 좋은 특허라 할 수 있습니다. 특허의 가치가 높다면 그 권리가 안정적이고, 높은 특허유지비를 지불하더라도 특허권을 유지하려고 하기 때문입니다.

종합평가등급 (Quality Ratings)

등급(S~C2)은 대상특허와 유사특허의 특허 생존지수를 상호 비교하여 평가등급을 9단계로 부여합니다. 등급분포는 표준정규분포 (N(0,1))를 따르도록 되어 있으며, 평균값 또는 중앙값에 상응하는 등급이 'B'등급으로 부여됩니다. 또한, 등급분포는 기존 평가서비스의 경험을 바탕으로 최적의 등급 분포가 이루어질 수 있도록 조절하였습니다.

등급	C2	C1	B3	B2	B1	A3	A2	A1	S
배분율(%)	5.0%	7.5%	10.0%	15.0%	25.0%	15.0%	10.0%	7.5%	5.0%
누적비율(%)	100.0%	95.0%	87.5%	77.5%	62.5%	37.5%	22.5%	12.5%	5.0%

평가요소 (Rating Factors)

권리성 평가요소

평가항목	설 명
권리의 안정성	• 등록 특허(해외 권리범위를 포함)당시와 비교하여 해외 정구항이 변동이 있는지를 평가하는 항목
독립청구항수	• 독립청구항을 통해 권리적 무리성을 평가하는 항목
정구범위	• 특허의 권리적 경계(Boundary)를 평가하는 항목

기술성 평가요소

평가항목	설 명
기술의 완전성	• 발명자간 상호협력을 통한 기술적 완성도를 평가하는 항목
기술의 결합도	• 공동연구에 따른 기술적 확장성을 평가하는 요소
기술의 응집도	• 대상특허의 기술적 응집정도를 평가하는 항목
국제경쟁도(연구)	• 특허기술 연구를 위한 국제적 수준의 경쟁강도를 평가하는 요소

상업성 평가요소

평가항목	설 명
특허 점유도	• 해당 특허권자가 관련기술분야에서 차지하는 특허점유율을 평가하는 항목
지역확장성	• 대상특허의 지역적 권리범위를 평가하는 항목
국제경쟁도(권리)	• 대상특허에 대한 국제 공동연구를 통해 상업적 활용 가능성을 평가하는 항목
활용성	• 구체적인 도면을 통해 상업적으로 활용 가능한지를 평가하는 항목

K-PEG 담당자 : 최용욱 (02-6915-6464)

三、KIPA 交流相關照片

贈趙副會長伴手禮

拜會趙副會長後合影

KIPA 交流會議-1

KIPA 交流會議-2

KIPA 交流會議-3

KIPA 會後合影

四、PIPC 交流相關照片

拜訪 PIPC 趙理事長

會議開始前合影

贈趙理事長伴手禮

PIPC 交流會議-1

PIPC 交流會議-2

PIPC 交流會議-3

PIPC 交流會議-4

PIPC 交流會議-5