

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局

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2013 年 11 月 21 日 (21.11.2013)



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H04N 21/254 (2011.01) H04N 21/437 (2011.01)
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- (30) 优先权:
201210391128.6 2012 年 10 月 15 日 (15.10.2012) CN
- (71) 申请人: 中兴通讯股份有限公司 (ZTE CORPORATION) [CN/CN]; 中国广东省深圳市南山区高新技术产业园科技南路中兴通讯大厦, Guangdong 518057 (CN)。
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FICE); 中国北京市海淀区海淀南路 21 号中关村知识产权大厦 B 座 2 层, Beijing 100080 (CN)。

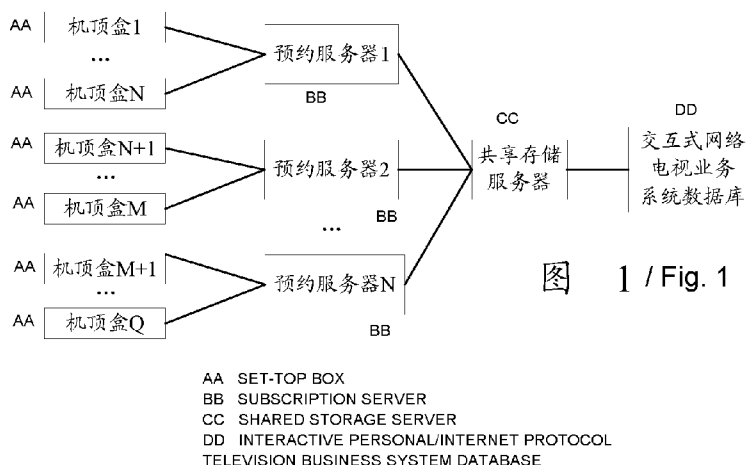
(81) 指定国 (除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW。

(84) 指定国 (除另有指明, 要求每一种可提供的地区保护): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG)。

[见续页]

(54) Title: INTERACTIVE PERSONAL/INTERNET PROTOCOL TELEVISION SUBSCRIPTION SYSTEM, AND SUBSCRIPTION PLAN MANAGEMENT METHOD AND DEVICE

(54) 发明名称: 交互式网络电视预约系统及预约计划管理方法、设备



(57) Abstract: Disclosed are an interactive personal/Internet Protocol television (IPTV) subscription system and a subscription plan management method and device. The method comprises: a subscription server receiving a subscription plan addition request sent by a digital video recorder (DVR) set-top box, wherein the subscription plan addition request carries a to-be-added subscription plan; the subscription server acquiring, from a shared storage server, a subscription plan which has been added by a user and corresponds to the DVR set-top box; and according to the acquired added subscription plan, the subscription server carrying out conflict handling on the to-be-added subscription plan when the to-be-added subscription plan is determined to be beyond the recording capability of the DVR set-top box. The technical solution of the embodiments of the present invention solves the technical problems in the related art that a subscription server is overloaded and the fault handling capability of the system is relatively low, reduces the load on the subscription server, and improves the fault handling capability.

(57) 摘要:

[见续页]

**本国际公布:**

— 包括国际检索报告(条约第 21 条(3))。

— 在修改权利要求的期限届满之前进行, 在收到该修改后将重新公布(细则 48.2(h))。

— 根据申请人的请求, 在条约第 21 条(2)(a)所规定的期限届满之前进行。

(88) **国际检索报告公布日期:**

2014 年 1 月 9 日

本发明实施例公开了一种交互式网络电视 (IPTV) 预约系统及预约计划管理方法、设备, 所述方法包括: 预约服务器接收数字视频摄像机 (DVR) 机顶盒发起的预约计划添加请求, 其中, 预约计划添加请求中携带有待添加的预约计划; 预约服务器从共享存储服务器中获取 DVR 机顶盒所对应的用户已经添加的预约计划; 预约服务器根据获取的已经添加的预约计划, 确定所述待添加的预约计划超出所述 DVR 机顶盒的录制能力时, 对待添加的预约计划进行冲突处理; 通过本发明实施例的技术方案, 解决了相关技术中预约服务器负载过大, 系统的对故障的处理能力较低的技术问题, 降低了预约服务器的负载, 提高对故障的处理能力。

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2013/079557

A. CLASSIFICATION OF SUBJECT MATTER

See the extra sheet

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC: H04N, H04L, G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CNPAT, WPI, EPODOC, CNKI: Network Television, IP television, IPTV, Set-Top Box, STB, program, video+, record+, DVR, subscrib+, reserve, plan, planning, server, load, conflict, repetition, coincide, same, already, task, assignment, menu, EPG

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	CN 102917249 A (NANJING BRANCH OF ZTE CORPORATION), 06 February 2013 (06.02.2013), description, paragraphs [0030]-[0104], and figures 1-7	1-15
A	CN 101815205 A (ZTE CORP.), 25 August 2010 (25.08.2010), the whole document	1-15
A	CN 102474584 A (ROYAL DUTCH PHILIPS ELECTRONICS LTD.), 23 May 2012 (23.05.2012), the whole document	1-15
A	US 2007/0118857 A1 (SBS KNOWLEDGE VENTURES, L.P.), 24 May 2007 (04.05.2007), the whole document	1-15

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:	“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
“A” document defining the general state of the art which is not considered to be of particular relevance	“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
“E” earlier application or patent but published on or after the international filing date	“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	“&” document member of the same patent family
“O” document referring to an oral disclosure, use, exhibition or other means	
“P” document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 27 September 2013 (27.09.2013)	Date of mailing of the international search report 24 October 2013 (24.10.2013)
Name and mailing address of the ISA/CN: State Intellectual Property Office of the P. R. China No. 6, Xitucheng Road, Jimenqiao Haidian District, Beijing 100088, China Facsimile No.: (86-10) 62019451	Authorized officer ZHANG, Yujie Telephone No.: (86-10) 62413561

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/CN2013/079557

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN 102917249 A	06.02.2013	None	
CN 101815205 A	25.08.2010	WO 2011134258 A1	03.11.2011
CN 102474584 A	23.05.2012	WO 2011010261 A1	27.01.2011
		US 2012124635 A1	17.05.2012
		EP 2457374 A1	30.05.2012
US 2007/0118857 A1	04.05.2007	None	

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2013/079557

A. CLASSIFICATION OF SUBJECT MATTER

H04N 21/235 (2011.01) i

H04N 21/254 (2011.01) i

H04N 21/433 (2011.01) i

H04N 21/437 (2011.01) i

A. 主题的分类

参见附加页

按照国际专利分类(IPC)或者同时按照国家分类和 IPC 两种分类

B. 检索领域

检索的最低限度文献(标明分类系统和分类号)

IPC: H04N, H04L, G06F

包含在检索领域中的除最低限度文献以外的检索文献

在国际检索时查阅的电子数据库(数据库的名称, 和使用的检索词(如使用))

CNPAT, WPI, EPODOC, CNKI: 网络电视, IP 电视, 机顶盒, 节目, 录像, 录象, 录制, 预约, 预定, 计划, 服务器, 负载, 冲突, 重复, 重合, 相同, 同样, 已经, 任务, 菜单, IPTV, Set-Top Box, STB, program, video+, record+, DVR, subscrib+, reserve, plan, planning, server, load, conflict, repetition, coincide, same, already, task, assignment, menu, EPG

C. 相关文件

类 型*	引用文件, 必要时, 指明相关段落	相关的权利要求
P, X	CN 102917249 A (中兴通讯股份有限公司南京分公司) 06.2 月 2013 (06.02.2013) 说明书第[0030]段至第[0104]段, 图 1-7	1-15
A	CN 101815205 A (中兴通讯股份有限公司) 25.8 月 2010 (25.08.2010) 全文	1-15
A	CN 102474584 A (皇家飞利浦电子股份有限公司) 23.5 月 2012 (23.05.2012)全文	1-15
A	US 2007/0118857 A1 (SBS KNOWLEDGE VENTURES, L.P.) 24.5 月 2007 (04.05.2007) 全文	1-15



其余文件在 C 栏的续页中列出。



见同族专利附件。

* 引用文件的具体类型:

“A” 认为不特别相关的表示了现有技术一般状态的文件

“E” 在国际申请日的当天或之后公布的在先申请或专利

“L” 可能对优先权要求构成怀疑的文件, 或为确定另一篇
引用文件的公布日而引用的或者因其他特殊理由而引
用的文件(如具体说明的)

“O” 涉及口头公开、使用、展览或其他方式公开的文件

“P” 公布日先于国际申请日但迟于所要求的优先权日的文件

“T” 在申请日或优先权日之后公布, 与申请不相抵触, 但为了
理解发明之理论或原理的在后文件

“X” 特别相关的文件, 单独考虑该文件, 认定要求保护的
发明不是新颖的或不具有创造性

“Y” 特别相关的文件, 当该文件与另一篇或者多篇该类文件
结合并且这种结合对于本领域技术人员为显而易见时,
要求保护的发明不具有创造性

“&” 同族专利的文件

国际检索实际完成的日期

27.9 月 2013 (27.09.2013)

国际检索报告邮寄日期

24.10 月 2013 (24.10.2013)

ISA/CN 的名称和邮寄地址:

中华人民共和国国家知识产权局

中国北京市海淀区蓟门桥西土城路 6 号 100088

传真号: (86-10)62019451

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国际检索报告
关于同族专利的信息

国际申请号
PCT/CN2013/079557

检索报告中引用的 专利文件	公布日期	同族专利	公布日期
CN 102917249 A	06.02.2013	无	
CN 101815205 A	25.08.2010	WO 2011134258 A1	03.11.2011
CN 102474584 A	23.05.2012	WO 2011010261 A1	27.01.2011
		US 2012124635 A1	17.05.2012
		EP 2457374 A1	30.05.2012
US 2007/0118857 A1	04.05.2007	无	

A. 主题的分类

H04N 21/235 (2011.01) i

H04N 21/254 (2011.01) i

H04N 21/433 (2011.01) i

H04N 21/437 (2011.01) i