

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.
Petitioner

v.

HUAWEI TECHNOLOGY COMPANY, INC.
Patent Owner

DECLARATION OF MARK GRAYSON

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

I, Mark Grayson, declare as follows:

1. I make this Declaration in support of Petitioner Cisco Systems, Inc.'s ("Cisco") Petition, and specifically, to attest to facts relating the public availability of 3GPP TS 23.125 and 3GPP TS 23.825 in the 2003 and 2004 time frame. (*See* Exhibit 1013 & 1023.)

2. I am over the age of twenty-one (21) years, am competent to testify in the matters stated herein, have personal knowledge of the facts and statements in this Declaration, all of the facts and circumstances described herein took place within the United States, and each of the facts and statements is true and correct.

3. I am currently employed as a "Distinguished Consulting Engineer" at Cisco Systems, Inc. ("Cisco"). I have been employed at Cisco for over 16 years, and much of my work at Cisco relates to the field of wireless communications.

4. From the years of 2003-2008, I was a Cisco representative for System Architecture work with the 3rd Generation Partnership Project (3GPP). 3GPP is the organization responsible for setting cellular communications standards, such as 3G and Long-Term Evolution (LTE). 3GPP is a collaboration among various industry stake holders, such as carriers and networking equipment manufacturers like Cisco. Through my work with 3GPP, I have personal knowledge of 3GPP's policies and procedures, including 3GPP's policies and procedures related to the publishing and distribution of 3GPP documents.

5. Throughout the time period that I was a Cisco representative for System Architecture work from 2003 to 2008, 3GPP specifications and reports, including drafts, were publically distributed by 3GPP on its website without any restriction. Specifically, all specifications and reports could be found at <http://www.3gpp.org/ftp/> , and were accessible by any member of the public. In fact, 3GPP documents are still accessible by the public at that address. As part of its regular business practices, as shown below, the 3GPP organization records the date a document was last modified on the FTP website, and displays that date next to the document:

4/8/2003	1:25 PM	110713	23825-030.zip
6/2/2003	2:56 PM	113821	23825-050.zip
7/17/2003	8:47 AM	140754	23825-060.zip
7/24/2003	8:01 AM	115362	23825-061.zip
9/1/2003	8:05 AM	133258	23825-070.zip
9/10/2003	3:09 PM	63701	23825-100.zip
11/7/2003	8:42 AM	142921	23825-110.zip
12/10/2003	12:51 AM	180559	23825-120.zip
12/9/2003	10:39 PM	180897	23825-130.zip
1/26/2004	4:33 PM	191314	23825-140.zip

(See e.g., http://www.3gpp.org/ftp/Specs/archive/23_series/23.825/)

6. Throughout the time period that I was a Cisco representative for System Architecture work in 3GPP from 2003 to 2008, the 3GPP organization had a formalized process for creating specifications and reports, and every stage of the process is documented. My understanding is that process has not changed, and is still the same today. All of the documentation created as part of this process was publically available on the 3GPP website, without any restriction. For example, as part of its regular business practices, the 3GPP organization made meeting

agendas, invitations, meeting minutes, and meeting reports available on its website for every meeting that occurred in the 3GPP organization, including detailed explanations of all changes made to 3GPP specifications and reports. That information was accessible by the public in 2003 to 2008 from the 3GPP ftp website, and has remained accessible on the 3GPP FTP website to present day.

7. 3GPP, at a high-level, is generally split into different Technical Specification Groups (TSGs). Each TSG consists of multiple Working Groups (WGs). Working Groups meet many times throughout the year, and are generally responsible for initially creating and initially agreeing upon changes to draft specifications. TSGs meet quarterly, and finally approve changes to technical specifications.

8. 3GPP also plans “releases” of specifications and reports. For example, the current release for 3GPP is release 14. A release includes a group of specifications and reports, that are internally consistent. Prior to a release, the working groups and TSGs work on preparing and approving drafts of specifications and reports until they are in final form for the release. During this time, specifications and reports are given version numbers, which are incremented after each working group and TSG approves changes to the specifications and reports. Generally, the version number of the specification or report reflects the

release for which it is planned. For example, if a specification or report is to be released under Release 8, the version number will begin with the number 8.

9. Content of specifications and reports is added or changed to specifications through a series of “change requests” that occur at the working-group level. Change requests are generally relative to the most current version of a document, which members of the public and 3GPP members regularly access via the 3GPP website. Prior to, and during a meeting, members circulate change requests among the working group for potential agreement. Each change request has a pre-assigned number, which is part of a block of change requests numbers assigned to the working group prior to the meeting by the secretary of 3GPP.

10. Throughout the time period that I was a Cisco representative for System Architecture work in 3GPP from 2003 to 2008, after a WG meeting, all of the change requests were incorporated into the current draft, the version number was incremented, and the draft was uploaded to the 3GPP website. Drafts, including previous drafts were, and still are, accessible through the 3GPP website, which is available at <http://www.3gpp.org/ftp/Specs/>. The date shown next to each document is the date that document was uploaded to the website, and also the date it was last modified. Thus, one can determine when a document was first made publically available by 3GPP by looking at the dates the documents were uploaded to the 3GPP FTP website.

11. A draft 3GPP specification or report itself has a number of important components that help identify the date it was first made publically available. For example, as shown below, a 3GPP report begins with two letters identifying it as a report or specification. “TR” means it is a “technical report” and “TS” means it is a “technical specification.” The identification continues with the number of the specification or report, the version number, and a month/year identifier for when the specification or report draft was first created:

3GPP TR 23.825 V1.2.0 (2003-11)

Technical Report

(See Exhibit 1013, p. 1)

12. At the end of a draft specification and report, as shown below, the document lists a change history, showing the dates when changes were made and the Change Requests that contained those changes:

Annex B: Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2002-11					First draft		0.1.0
2003-02					Output version from SA2#29. Changes proposed in S2-030408rev2, S2-030409 and S2-030410 are implemented. Primarily architecture requirements and descriptive text added.	0.1.0	0.2.0
2003-03					Updated with approved contributions from SA2#30 S2-030947, S2-030951, S2-030952, S2-030953r3, S2-030954, and S2-030851 Some editorial fixes (formats, blank lines, etc)	0.2.0	0.3.0
2003-04					Updated with approved contributions from SA2#31 S2-031523, S2-031524, S2-031525, S2-031526, S2-031608	0.3.0	0.4.0
2003-04					Updated with minor editorial changes	0.4.0	0.4.1
2003-05					Updated with approved contributions from SA2#32	0.4.1	0.5.0

(See Exhibit 1013, p.23)

13. Throughout the time period that I was a Cisco representative for System Architecture work in 3GPP from 2003 to 2008, a person interested in finding specifications or reports related to 3G and LTE standards would have been able to quickly locate those documents on the 3GPP website. For example, as shown below, in 2003, the 3GPP website indexed its documents via subject area:

Subject of specification series (5)	3G/GSM R99 and later	GSM only (Rel-4 and later)	GSM only (before Rel-4)
General information (long defunct)			00 series
Requirements	21 series	41 series	01 series
Service aspects ("stage 1")	22 series	42 series	02 series
Technical realization ("stage 2")	23 series	43 series	03 series
Signalling protocols ("stage 3") - user equipment to network	24 series	44 series	04 series
Radio aspects	25 series	45 series	05 series
CODECs	26 series	46 series	06 series
Data	27 series	47 series (none exists)	07 series
Signalling protocols ("stage 3") - RSS-CN	28 series	48 series	08 series
Signalling protocols ("stage 3") - intra-fixed-network	29 series	49 series	09 series
Programme management	30 series	50 series	10 series
User Identity Module (SIM / USIM)	31 series	51 series	11 series
O&M	32 series	52 series	12 series
Access requirements and test specifications		13 series (1)	13 series (1)
Security aspects	33 series	(2)	(2)
SIM and test specifications	34 series	(2)	11 series
Security algorithms (3)	35 series	55 series	(4)

Note (1): The 13 series GSM specifications relate to European-Union-specific regulatory standards. On the closure of ETSI TC SMG, responsibility for these specifications was transferred to ETSI TC MSG, (Mobile Specification Group) and they do not appear on the 3GPP file server.

Note (2): The specification of these aspects are spread throughout several series.

Note (3): Algorithms may be subject to export licencing conditions. See the [relevant 3GPP page](#). See also the [relevant ETSI pages](#).

Note (4): The original GSM algorithms are not published and are controlled by the [GSM Association](#).

Note (5): Spec numbers follow a [numbering system](#).

(Exhibit 1029.) The website operated the same in 2004. (Exhibit 1030.)

14. After selecting the proper subject area, as shown below, the 3GPP website then indexed all of the documents relevant to that subject area:

TR 23.8xx	UMTS Network Aspects, Signalling requirements for UMTS	IP Core Network Aspects
TR 23.814	Separating RR and MM specific parts of the MS Classmark	.
TR 23.815	Charging implications of IMS architecture	.
TR 23.821	Architecture Principles for Release 2000	SPECIFICATION WITHDRAWN
TR 23.825	Overall architecture aspects of IP flow based bearer level charging; Stage 2	.
TR 23.835	Study into applicability of Galileo in Location Services (LCS)	.
TR 23.841	Presence service architecture	.
TR 23.846	Multimedia Broadcast/Multicast Service (MBMS); Stage 2	.

(Exhibit 1031 (website in 2003); *see also* Exhibit 1032 (website in 2004).)

15. As shown above, by clicking on the relevant document number, an interested person could then download the relevant document from the 3GPP website.

3GPP TR 23.825 version 1.2.0 (Exhibit 1013)

16. Based on my understanding of 3GPP policies and procedures, Exhibit 1013 (3GPP TR 23.825) was available for download by an interested member of the public at least as of December 10, 2003.

17. First, as shown below, the 3GPP FTP website, which is available at “http://www.3gpp.org/ftp/Specs/archive/23_series/23.825/” recorded the last modified date as: “12/10/2003”:

12/10/2003 12:51 AM	180559 23825-120.zip
12/9/2003 10:39 PM	180897 23825-130.zip
1/26/2004 4:33 PM	191314 23825-140.zip

(Exhibit 1033.)

18. As I explained above, based on my understanding of 3GPP ordinary business practices, the 3GPP FTP website records the last modified date of any file uploaded to it. Accordingly, as shown above, Exhibit 1013 was freely downloadable by interested members of the public at least as early as December 10, 2003.

19. Second, the 3GPP FTP website date is also consistent with a March 4 2004 Internet Archive capture of the 3GPP FTP website, which also shows the last modified date as 12/10/2003¹:

¹ Note, the 3GPP FTP website displays time-zone adjusted dates. The Internet Archive capture shows a date of December 9 because of a one-hour time

08 April 2003	12:25	110713	23825-030.zip
02 June 2003	13:56	113821	23825-050.zip
17 July 2003	07:47	140754	23825-060.zip
24 July 2003	07:01	115362	23825-061.zip
01 September 2003	07:05	133258	23825-070.zip
10 September 2003	14:09	63701	23825-100.zip
07 November 2003	07:42	142921	23825-110.zip
09 December 2003	23:51	180559	23825-120.zip
09 December 2003	21:39	180897	23825-130.zip
26 January 2004	15:33	191314	23825-140.zip

(Exhibit 1034)

20. Finally, as discussed above, Exhibit 1013 lists on its face a creation date of 11/2003, which is also consistent with 3GPP FTP website date of December 10, 2003. As I explained above, Exhibit 1013 also consistently lists changes to TR 23.825 as occurring in November of 2003. And the working group meeting that created Exhibit 1013 occurred on November 28-29, 2003. (Exhibit 1020)

3GPP TS 23.125 version 6.2.0 (Exhibit 1023)

21. Based on my understanding of 3GPP policies and procedures, Exhibit 1023 (3GPP TR 23.125) was available for download by an interested member of the public at least as of September 22, 2004.

zone difference from where the Internet Archive computers are located and the computer that accessed the 3GPP FTP website in Exhibit 1033.

22. First, as shown below, the 3GPP FTP website, which is available at “http://www.3gpp.org/ftp/Specs/archive/23_series/23.825/” recorded the last modified date as: “9/22/2004”:

2/5/2004	4:00 PM	96366	23125-010.zip
2/27/2004	3:27 PM	228223	23125-021.zip
3/15/2004	2:45 PM	104727	23125-200.zip
4/1/2004	10:43 AM	103317	23125-600.zip
6/22/2004	12:35 PM	153638	23125-610.zip
9/22/2004	9:23 AM	198167	23125-620.zip
1/5/2005	4:39 PM	200149	23125-630.zip
3/24/2005	2:36 PM	164962	23125-640.zip
6/15/2005	3:28 PM	173850	23125-650.zip
10/4/2005	4:02 PM	172313	23125-660.zip
11/25/2005	12:00 PM	172387	23125-670.zip
3/10/2006	4:37 AM	172009	23125-680.zip
6/14/2007	11:52 AM	168314	23125-700.zip

(Exhibit 1035.)

23. As I explained above, based on my understanding of 3GPP ordinary business practices, the 3GPP FTP website records the last modified date of any file uploaded to it. Accordingly, as shown above, Exhibit 1023 was freely downloadable by interested members of the public at least as early as September 22, 2004.

24. Second, the 3GPP FTP website date is also consistent with an October 29, 2004 Internet Archive capture of the 3GPP FTP website, which also shows the last modified date as 9/22/2004:

[\[To Parent Directory\]](#)

05 February 2004	16:00	96366	23125-010.zip
27 February 2004	15:27	228223	23125-021.zip
15 March 2004	14:45	104727	23125-200.zip
01 April 2004	10:43	103317	23125-600.zip
22 June 2004	12:35	153638	23125-610.zip
22 September 2004	09:23	198167	23125-620.zip

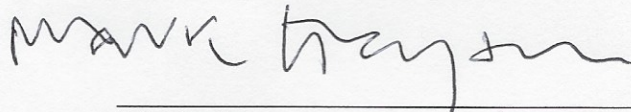
(Exhibit 1036.)

25. Finally, Exhibit 1023 lists on its face a creation date of 9/2004, which is also consistent with the 3GPP FTP website date of September 22, 2004. Exhibit 1023 also consistently lists changes to TS 23.125 as occurring in September of 2004.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Executed this 7th day of September, 2017.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Mark Grayson", written over a horizontal line.

Mark Grayson