IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION

UNILOC USA, INC. and UNILOC LUXEMBOURG, S.A.,	§	Civil Action No. 1:18-cv-00161-LY
Plaintiffs,	§	
v.	§	PATENT CASE
APPLE INC.,	§	
Defendant.	§	

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs, Uniloc USA, Inc. ("Uniloc USA") and Uniloc Luxembourg, S.A. ("Uniloc Luxembourg") (together, "Uniloc"), for their first amended complaint against defendant, Apple Inc. ("Apple"), allege as follows:

THE PARTIES

1. Uniloc USA is a Texas corporation having a principal place of business at Legacy Town Center I, Suite 380, 7160 Dallas Parkway, Plano, Texas 75024.

2. Uniloc Luxembourg is a Luxembourg public limited liability company having a principal place of business at 15, Rue Edward Steichen, 4th Floor, L-2540, Luxembourg (R.C.S. Luxembourg B159161).

3. Apple is a California corporation, having a principal place of business in Cupertino, California and regular and established places of business at 12535 Riata Vista Circle and 5501 West Parmer Lane, Austin, Texas. Apple offers its products and/or services, including

those accused herein of infringement, to customers and potential customers located in Texas and in the judicial Western District of Texas.

JURISDICTION

4. Uniloc brings this action for patent infringement under the patent laws of the United States, 35 U.S.C. § 271, *et seq.* This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331, 1332(a), and 1338(a).

COUNT I
(INFRINGEMENT OF U.S. PATENT NO. 7,167,487)

5. Uniloc incorporates paragraphs 1-4 above by reference.

6. Uniloc Luxembourg is the owner, by assignment, of U.S. Patent No. 7,167,487 ("the '487 Patent"), entitled NETWORK WITH LOGIC CHANNELS AND TRANSPORT CHANNELS, which issued on January 23, 2007. A copy of the '487 Patent is attached as Exhibit A.

7. Uniloc USA is the exclusive licensee of the '487 Patent, with ownership of all substantial rights, including the right to grant sublicenses, to exclude others, and to enforce and recover past damages for infringement.

8. The '487 Patent describes in detail and claims in various ways inventions in wireless networks having logic channels and transport channels developed by Koninklijke Philips Electronics N.V. around 2001.

9. The '487 Patent describes problems and shortcomings in the then-existing field of communications in computer networks devices and describes and claims novel and inventive technological improvements and solutions to such problems and shortcomings. The technological improvements and solutions described and claimed in the '487 Patent were not

conventional or generic at the time of their respective inventions but involved novel and non-obvious approaches to the problems and shortcomings prevalent in the art at the time.

10. The inventions claimed in the ’487 Patent involve and cover more than just the performance of well-understood, routine and/or conventional activities known to the industry prior to the invention of such novel and non-obvious systems and devices by the ’487 Patent inventor.

11. The inventions claimed in the ’487 Patent represent technological solutions to technological problems. The written description of the ’487 Patent describes in technical detail each of the limitations of the claims, allowing a person of ordinary skill in the art to understand what the limitations cover and how the non-conventional and non-generic combination of claim elements differed markedly from and improved upon what may have been considered conventional or generic.

12. Apple imports, uses, offers for sale, and sells in the United States electronic devices that operate in compliance with HSPA/HSPA+ standardized in UMTS 3GPP Release 6 and above, including: (1) iPhone 3G, iPhone 3GS, iPhone 4, iPhone 4s, iPhone5, iPhone 5c, iPhone 5s, iPhone 6, iPhone 6 Plus, iPhone 6s, iPhone 6s Plus, iPhone SE, iPhone 7, iPhone 7 Plus, iPhone 8, iPhone 8 Plus, iPhone X smartphones, and (2) iPad (3rd, 4th and 5th generation), iPad Mini, iPad Mini 2, iPad Mini 3, iPad Mini 4, iPad Pro, iPad Air, iPad Air 2 tablets (collectively, the “Accused Infringing Devices”).

13. The Accused Infringing Devices implement networks having a first plurality of logic channels and a second plurality of transport channels associated by the MAC layer for sending and receiving packet units in accordance with HSPA/HSPA+ standardized in UMTS 3GPP Release 6 and above using a minimum bit rate criteria.

14. Apple has infringed, and continues to infringe, claims of the '487 Patent in the United States, including claims 1, 3, 5-6, and 12, by making, using, offering for sale, selling and/or importing the Accused Infringing Devices in violation of 35 U.S.C. §271(a).

15. Using claim 1 merely as an illustrative example, the Accused Infringing Devices implement a network with a first plurality of logic channels with which is associated a second plurality of transport channels, which transport channels arc provided for transmitting transport blocks formed from packet units of the logic channels. For example, the Accused Infringing Devices communicate with the base station in a network by associating logical channels with the transport channels, by means of a MAC layer. Each user equipment has a MAC Layer, which receives PDUs (packet units) on logical channels and multiplexes the upper layer PDUs into transport blocks that are passed to the physical layer using transport channels, as seen below.

5.3.1.1.2 Mapping between logical channels and transport channels

5.3.1.1.2.1 Mapping in Uplink

In Uplink, the following connections between logical channels and transport channels exist:

- CCCH can be mapped to RACH;
- DCCH can be mapped to RACH;
- DCCH can be mapped to DCH;
- DCCH can be mapped to USCH (in TDD mode only);
- DCCH can be mapped to E-DCH;
- DTCH can be mapped to RACH;
- DTCH can be mapped to DCH;
- DTCH can be mapped to USCH (in TDD mode only);
- SHCCH can be mapped to RACH (in TDD mode only);
- SHCCH can be mapped to USCH (in TDD mode only);
- DTCH can be mapped to E-DCH.

http://www.etsi.org/deliver/etsi_ts/125300_125399/125301/06.06.00_60/ts_125301v060600p.pdf (Page 16).

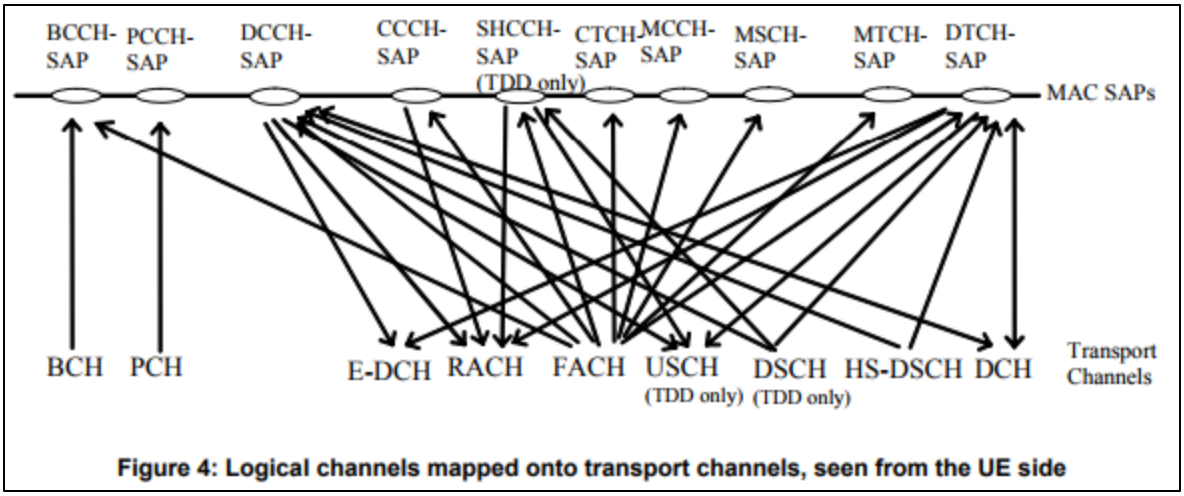


Figure 4: Logical channels mapped onto transport channels, seen from the UE side

http://www.etsi.org/deliver/etsi_ts/125300_125399/125301/06.06.00_60/ts_125301v060600p.pdf (Page 17)

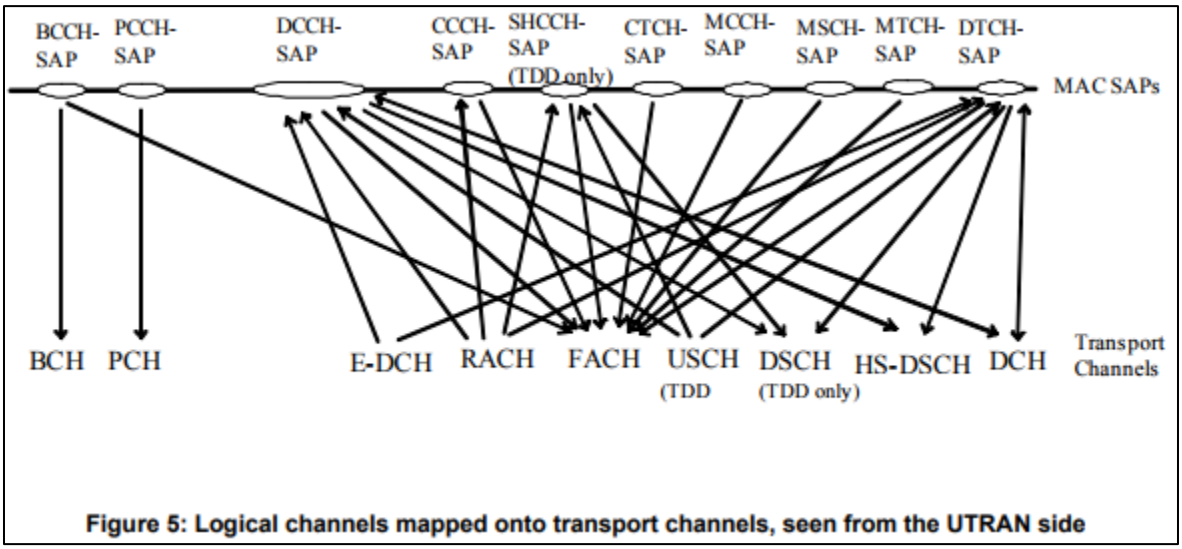
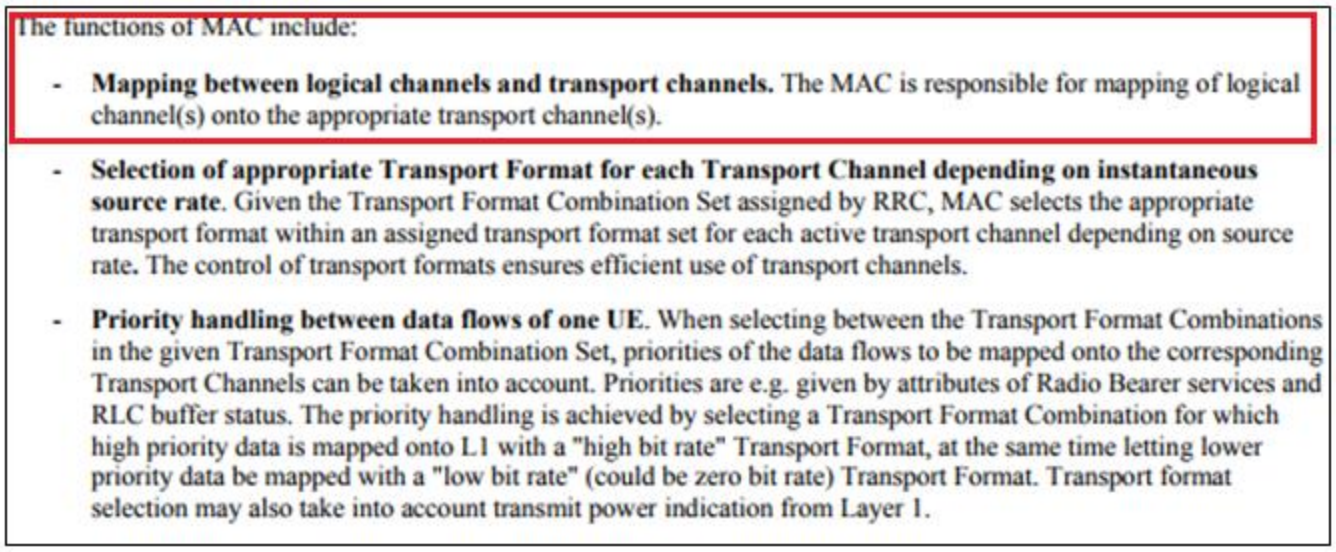


Figure 5: Logical channels mapped onto transport channels, seen from the UTRAN side

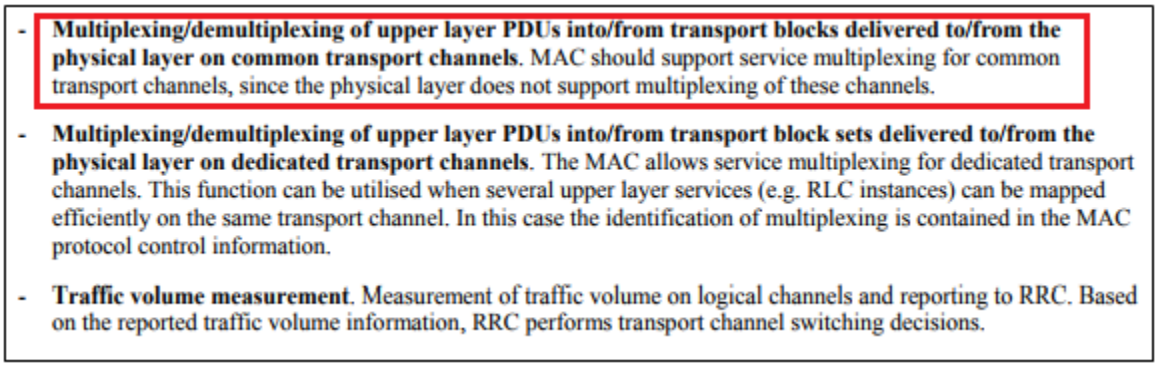
http://www.etsi.org/deliver/etsi_ts/125300_125399/125301/06.06.00_60/ts_125301v060600p.pdf (Page 17)



The functions of MAC include:

- **Mapping between logical channels and transport channels.** The MAC is responsible for mapping of logical channel(s) onto the appropriate transport channel(s).
- **Selection of appropriate Transport Format for each Transport Channel depending on instantaneous source rate**. Given the Transport Format Combination Set assigned by RRC, MAC selects the appropriate transport format within an assigned transport format set for each active transport channel depending on source rate. The control of transport formats ensures efficient use of transport channels.
- **Priority handling between data flows of one UE**. When selecting between the Transport Format Combinations in the given Transport Format Combination Set, priorities of the data flows to be mapped onto the corresponding Transport Channels can be taken into account. Priorities are e.g. given by attributes of Radio Bearer services and RLC buffer status. The priority handling is achieved by selecting a Transport Format Combination for which high priority data is mapped onto L1 with a "high bit rate" Transport Format, at the same time letting lower priority data be mapped with a "low bit rate" (could be zero bit rate) Transport Format. Transport format selection may also take into account transmit power indication from Layer 1.

http://www.etsi.org/deliver/etsi_ts/125300_125399/125301/06.06.00_60/ts_125301v060600p.pdf (Page 18)



- **Multiplexing/demultiplexing of upper layer PDUs into/from transport blocks delivered to/from the physical layer on common transport channels**. MAC should support service multiplexing for common transport channels, since the physical layer does not support multiplexing of these channels.
- **Multiplexing/demultiplexing of upper layer PDUs into/from transport block sets delivered to/from the physical layer on dedicated transport channels**. The MAC allows service multiplexing for dedicated transport channels. This function can be utilised when several upper layer services (e.g. RLC instances) can be mapped efficiently on the same transport channel. In this case the identification of multiplexing is contained in the MAC protocol control information.
- **Traffic volume measurement**. Measurement of traffic volume on logical channels and reporting to RRC. Based on the reported traffic volume information, RRC performs transport channel switching decisions.

http://www.etsi.org/deliver/etsi_ts/125300_125399/125301/06.06.00_60/ts_125301v060600p.pdf (Page 18).

16. The Accused Infringing Devices implement a network wherein a plurality of valid transport format combinations is allocated to the transport channels, which combinations indicate the transport blocks provided for transmission on each transport channel. A plurality of transport format combinations is allocated to the transport channels to indicate the transport blocks to be transmitted on each transport channel. For example, the UE is assigned transport format combinations (TFCs), used for transmitting on transport channels. For the enhanced DCH (E-

DCH) transport channel, the UE is configured to use a specific enhanced TFCs (E-TFCs) for defining characteristics of transport blocks.

> To each transport channel, there is an associated Transport Format (for transport channels with a fixed or slow changing rate) or an associated Transport Format Set (for transport channels with fast changing rate). A Transport Format is defined as a combination of encodings, interleaving, bit rate and mapping onto physical channels (see [4] for details). A Transport Format Set is a set of Transport Formats. E.g., a variable rate DCH has a Transport Format Set (one Transport Format for each rate), whereas a fixed rate DCH has a single Transport Format.

http://www.etsi.org/deliver/etsi_ts/125300_125399/125301/06.06.00_60/ts_125301v060600p.pdf (Page 13)

> The functions of MAC include:
>
> - **Mapping between logical channels and transport channels.** The MAC is responsible for mapping of logical channel(s) onto the appropriate transport channel(s).
> - **Selection of appropriate Transport Format for each Transport Channel depending on instantaneous source rate**. Given the Transport Format Combination Set assigned by RRC, MAC selects the appropriate transport format within an assigned transport format set for each active transport channel depending on source rate. The control of transport formats ensures efficient use of transport channels.
> - **Priority handling between data flows of one UE**. When selecting between the Transport Format Combinations in the given Transport Format Combination Set, priorities of the data flows to be mapped onto the corresponding Transport Channels can be taken into account. Priorities are e.g. given by attributes of Radio Bearer services and RLC buffer status. The priority handling is achieved by selecting a Transport Format Combination for which high priority data is mapped onto L1 with a "high bit rate" Transport Format, at the same time letting lower priority data be mapped with a "low bit rate" (could be zero bit rate) Transport Format. Transport format selection may also take into account transmit power indication from Layer 1.

http://www.etsi.org/deliver/etsi_ts/125300_125399/125301/06.06.00_60/ts_125301v060600p.pdf (Page 18).

> The transmission format and data allocation shall follow the requirements below:
>
> - Only E-TFCs from the configured E-TFCS shall be considered for the transmission;
> - For all logical channels, if the logical channel belongs to a non-scheduled MAC-d flow, its data shall be considered as available up to the corresponding non-scheduled grant, if the logical channel does not belong to a non-scheduled MAC-d flow, its data shall be considered as available up to the Serving Grant;

http://www.etsi.org/deliver/etsi_ts/125300_125399/125321/06.18.00_60/ts_125321v061800p.pdf (Page 79)

5.6.5 Protocol termination for DSCH

5.6.5.1 DSCH definition

The DSCH is only supported for TDD. The DSCH is a resource that exists in downlink only. It has only impact on the physical and transport channel levels, so there is no definition of shared channel in the logical channels provided by MAC.

The DSCH is a transport channel shared dynamically between several UEs. The DSCH is mapped to one or several physical channels such that a specified part of the downlink resources is employed. For the DSCH no macrodiversity is applied, i.e. a specific DSCH is transmitted in a single cell only.

The DSCH is defined as a shared downlink channel for which resource allocation is performed by RRC in Controlling RNC. The allocation messages, including UE identification, are transmitted on SHCCH, which is mapped on RACH/FACH. Several DSCH can be multiplexed on a CCTrCH in the physical layer, the transport formats of the DSCHs have to be selected from the transport format combination set of this CCTrCH. Each CCTrCH is mapped on one or more PDSCHs. If the transport format combination subset of a CCTrCH contains more than one transport format combination, a TFCI can be transmitted inside the PDSCH, or blind detection can be applied in the UE.

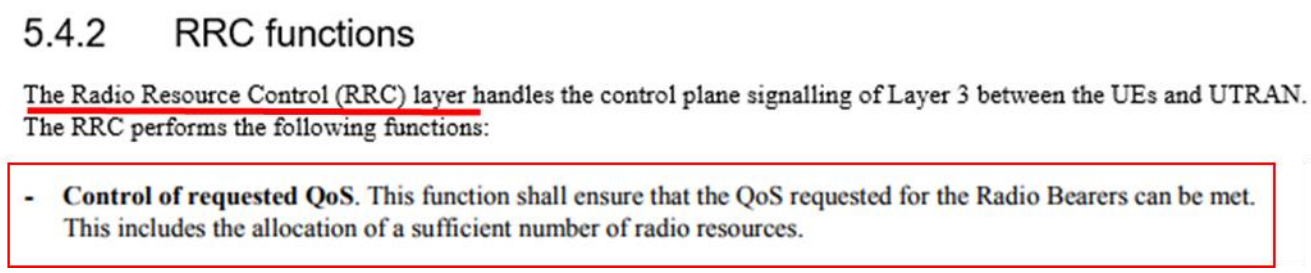
http://www.etsi.org/deliver/etsi_ts/125300_125399/125301/06.06.00_60/ts_125301v060600p.pdf (Page 35).

17. The Accused Infringing Devices implement a network wherein a selection algorithm is provided for selecting the transport format combinations, and wherein the selection algorithm uses a minimum bit rate criteria applicable to the respective logic channel. For example, when selecting a TFC from a set of valid TFCs, the selection algorithm takes into account the priorities of the data flow to be mapped onto the transport channels, as seen below.

The functions of MAC include:

- **Mapping between logical channels and transport channels.** The MAC is responsible for mapping of logical channel(s) onto the appropriate transport channel(s).
- **Selection of appropriate Transport Format for each Transport Channel depending on instantaneous source rate**. Given the Transport Format Combination Set assigned by RRC, MAC selects the appropriate transport format within an assigned transport format set for each active transport channel depending on source rate. The control of transport formats ensures efficient use of transport channels.
- **Priority handling between data flows of one UE**. When selecting between the Transport Format Combinations in the given Transport Format Combination Set, priorities of the data flows to be mapped onto the corresponding Transport Channels can be taken into account. Priorities are e.g. given by attributes of Radio Bearer services and RLC buffer status. The priority handling is achieved by selecting a Transport Format Combination for which high priority data is mapped onto L1 with a "high bit rate" Transport Format, at the same time letting lower priority data be mapped with a "low bit rate" (could be zero bit rate) Transport Format. Transport format selection may also take into account transmit power indication from Layer 1.

http://www.etsi.org/deliver/etsi_ts/125300_125399/125301/06.06.00_60/ts_125301v060600p.pdf (Page 18). Further, these priorities are set based on attributes of the Radio Bearer services, including QoS, as illustrated below.

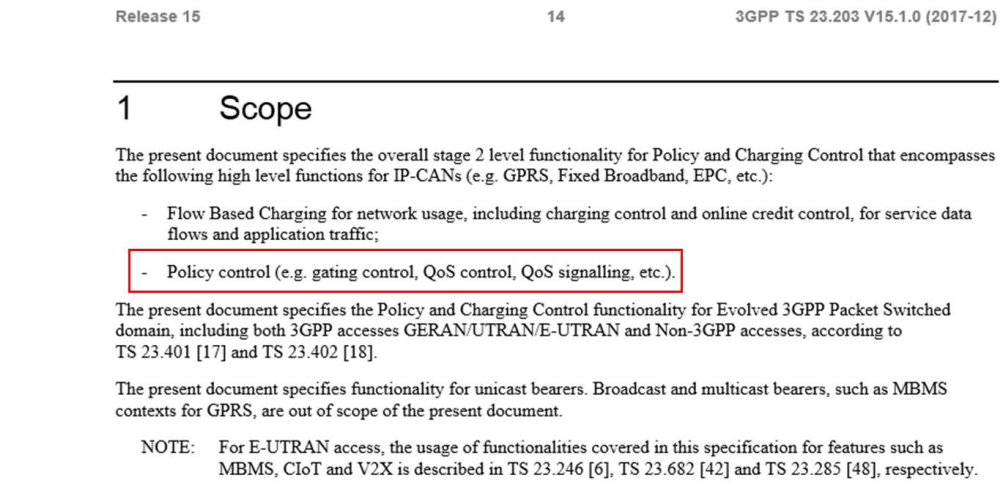


5.4.2 RRC functions

The Radio Resource Control (RRC) layer handles the control plane signalling of Layer 3 between the UEs and UTRAN. The RRC performs the following functions:

- **Control of requested QoS**. This function shall ensure that the QoS requested for the Radio Bearers can be met. This includes the allocation of a sufficient number of radio resources.

http://www.etsi.org/deliver/etsi_ts/125300_125399/125301/06.06.00_60/ts_125301v060600p.pdf (Page 30-31). QoS is defined and implemented by Policy and Control Architecture (Release 15) (PCC), which identifies QoS as being implemented via various QCI classes.



Release 15 14 3GPP TS 23.203 V15.1.0 (2017-12)

1 Scope

The present document specifies the overall stage 2 level functionality for Policy and Charging Control that encompasses the following high level functions for IP-CANs (e.g. GPRS, Fixed Broadband, EPC, etc.):

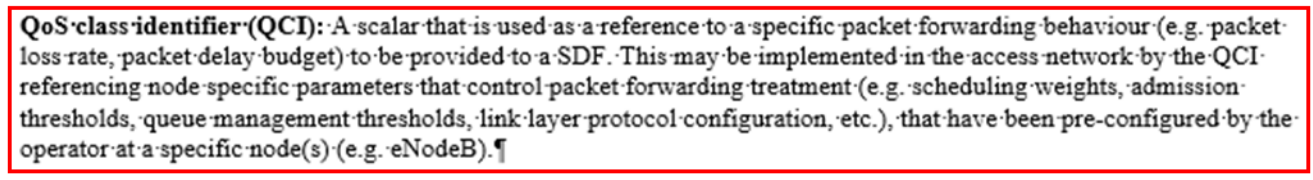
- Flow Based Charging for network usage, including charging control and online credit control, for service data flows and application traffic;
- Policy control (e.g. gating control, QoS control, QoS signalling, etc.).

The present document specifies the Policy and Charging Control functionality for Evolved 3GPP Packet Switched domain, including both 3GPP accesses GERAN/UTRAN/E-UTRAN and Non-3GPP accesses, according to TS 23.401 [17] and TS 23.402 [18].

The present document specifies functionality for unicast bearers. Broadcast and multicast bearers, such as MBMS contexts for GPRS, are out of scope of the present document.

NOTE: For E-UTRAN access, the usage of functionalities covered in this specification for features such as MBMS, CIoT and V2X is described in TS 23.246 [6], TS 23.682 [42] and TS 23.285 [48], respectively.

3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Policy and Charging Control Architecture (Release 15), p.14.



QoS class identifier (QCI): A scalar that is used as a reference to a specific packet forwarding behaviour (e.g. packet loss rate, packet delay budget) to be provided to a SDF. This may be implemented in the access network by the QCI referencing node specific parameters that control packet forwarding treatment (e.g. scheduling weights, admission thresholds, queue management thresholds, link layer protocol configuration, etc.), that have been pre-configured by the operator at a specific node(s) (e.g. eNodeB).¶

3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Policy and Charging Control Architecture (Release 15), p.18.

6.1.7 Standardized QoS characteristics

6.1.7.1 General

The service level (i.e., per SDF or per SDF aggregate) QoS parameters are QCI, ARP, GBR, and MBR.

3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Policy and Charging Control Architecture (Release 15), p.47. Certain QCI classes (1-4, 65-67, 75 and 82-83) include a Guaranteed Bit Rate (GBR), which is ensured by the PCC, as seen below.

Table 6.1.7-A: Standardized QCI characteristics

QCI	Resource Type	Priority Level	Packet Delay Budget (NOTE 13)	Packet Error Loss Rate (NOTE 2)	Example Services
1 (NOTE 3)	GBR	2	100 ms (NOTE 1, NOTE 11)	10^{-2}	Conversational Voice
2 (NOTE 3)		4	150 ms (NOTE 1, NOTE 11)	10^{-3}	Conversational Video (Live Streaming)
3 (NOTE 3, NOTE 14)		3	50 ms (NOTE 1, NOTE 11)	10^{-3}	Real Time Gaming, V2X messages Electricity distribution - medium voltage (e.g. TS 22.261 [51] clause 7.2.2) Process automation - monitoring (e.g. TS 22.261 [51] clause 7.2.2)
4 (NOTE 3)		5	300 ms (NOTE 1, NOTE 11)	10^{-6}	Non-Conversational Video (Buffered Streaming)
65 (NOTE 3, NOTE 9, NOTE 12)		0.7	75 ms (NOTE 7, NOTE 8)	10^{-2}	Mission Critical user plane Push To Talk voice (e.g., MCPTT)
66 (NOTE 3, NOTE 12)		2	100 ms (NOTE 1, NOTE 10)	10^{-2}	Non-Mission-Critical user plane Push To Talk voice
67 (NOTE 3, NOTE 12)		1.5	100 ms (NOTE 1, NOTE 10)	10^{-3}	Mission Critical Video user plane
75 (NOTE 14)		2.5	50 ms (NOTE 1)	10^{-2}	V2X messages
5 (NOTE 3)		1	100 ms (NOTE 1, NOTE 10)	10^{-6}	IMS Signalling
6 (NOTE 4)		6	300 ms	10^{-6}	Video (Buffered Streaming) TCP-based (e.g., www, e-mail, chat, ftp, p2p file

3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Policy and Charging Control Architecture (Release 15), p.50.

Table 6.1.7-B: Standardized QCI characteristics

QCI	Resource Type	Priority Level	Packet Delay Budget (NOTE B1)	Packet Error Loss Rate (NOTE B2)	Maximum Burst Size (NOTE B1)	Data Rate Averaging Window	Example Services
82 (NOTE B6)	GBR	1.9	10 ms (NOTE B4)	10^{-4} (NOTE B3)	255 bytes	2 s	Discrete Automation (TS 22.261 [51], table 7.2.2-1, row 2, "small packets")
83 (NOTE B6)	GBR	2.2	10 ms (NOTE B4)	10^{-4} (NOTE B3)	1358 bytes (NOTE B5)	2 s	Discrete Automation (TS 22.261 [51], table 7.2.2-1, row 2, "big packets")

3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Policy and Charging Control Architecture (Release 15), p.51.

6.1.1.3 PCC rule authorization and QoS rule generation

PCC Rule authorization is the selection of the QoS parameters (QCI, ARP, GBR, MBR, etc.) for the PCC rules.

The PCRF shall perform the PCC rule authorization for complete dynamic PCC rules belonging to AF sessions that have been selected in step 1, as described in clause 6.1.1.2, as well as for PCC rules without corresponding AF sessions. Based on AF instructions (as described in clause 6.1.5) dynamic PCC rules can be authorized even if they are not complete (e.g. due to missing service information regarding QoS or traffic filter parameters).

The PCC rule authorization depends on the IP-CAN bearer establishment mode of the IP-CAN session and the mode (UE or NW) of the PCC rule:

3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Policy and Charging Control Architecture (Release 15), p.37.

The PCC architecture shall be able to handle IP-CAN bearers that require a guaranteed bitrate (GBR bearers) and IP-CAN bearers for which there is no guaranteed bitrate (non-GBR bearers).

3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Policy and Charging Control Architecture (Release 15), p.24.

GBR bearer: An IP-CAN bearer with reserved (guaranteed) bitrate resources.

3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Policy and Charging Control Architecture (Release 15), p.17.

18. Apple has been on notice of the ’487 patent since, at the latest, the service of the original Complaint. Apple has also been on notice of Uniloc’s infringement allegations and theory of infringement since that date, and thus has known that its continued actions would contribute to the infringement of claims of the ’487 patent.

19. Apple has actively induced, and continues to actively induce, infringement by others, including customers using the Accused Infringing Devices, by encouraging them to use, and instructing them how to use, those devices that Apple has intentionally designed and programmed to operate in accordance with HSPA/HSPA+ standardized in UMTS 3GPP Release 6 and above whereby the devices infringe the asserted claims of the ’487 Patent.

20. Apple’s customers who use those devices in accordance with Apple’s design and intentions infringe claims of the ’487 Patent. Apple intentionally instructs its customers to

infringe through training videos, demonstrations, brochures, specifications and installation and user guides, such as those located at:

- www.apple.com/iphone-x/specs/
- www.apple.com/iphone-8/specs/
- www.apple.com/iphone-7/specs/
- www.apple.com/iphone-6s/specs/
- www.apple.com/iphone-se/specs/
- www.apple.com/ipad-pro/specs/
- www.apple.com/ipad-9.7/specs/
- www.apple.com/ipad-mini-4/specs/
- https://support.apple.com/kb/sp766?locale=en-US
- https://support.apple.com/kb/sp744?locale=en-US
- https://support.apple.com/kb/sp709?locale=en-US
- https://support.apple.com/en-US/specs/macnotebooks/

21. In its marketing and instructional materials, including those identified above, Apple specifically and intentionally instructs its customers to use the Apple Wireless Devices in an infringing manner:

In addition, the Accused Products are smartphones and tablets compliant with the HSPA/HSPA+ standard, as seen below.


iPhone 6s – Technical Specifications

Cellular and Wireless

- Model A1633
  LTE (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 27, 28, 29, 30)
  TD-LTE (Bands 38, 39, 40, 41)
  TD-SCDMA 1900 (F), 2000 (A)
  UMTS/HSPA+/DC-HSDPA (850, 900, 1700/2100, 1900, 2100 MHz)
  CDMA EV-DO Rev. A (800, 1700/2100, 1900, 2100 MHz)
  GSM/EDGE (850, 900, 1800, 1900 MHz)
- Model A1688
  LTE (Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 25, 26, 27, 28, 29)
  TD-LTE (Bands 38, 39, 40, 41)
  TD-SCDMA 1900 (F), 2000 (A)
  CDMA EV-DO Rev. A (800, 1700/2100, 1900, 2100 MHz)
  UMTS/HSPA+/DC-HSDPA (850, 900, 1700/2100, 1900, 2100 MHz)
  GSM/EDGE (850, 900, 1800, 1900 MHz)

Source: https://support.apple.com/kb/SP726?viewlocale=en_US&locale=en_US

22. Apple has intentionally designed and sells the Accused Infringing Devices to automatically operate in normal mode in compliance with HSPA/HSPA+ standardized in UMTS 3GPP Release 6 and above in violation of the '487 Patent.

23. Apple intends and knows that its customers use the Accused Infringing Devices to operate in compliance with HSPA/HSPA+ standardized in UMTS 3GPP Release 6 and above. When the Accused Infringing Devices are used as intended by Apple, Apple intentionally induces such infringement.

24. Apple has known and intended, since service of the original Complaint, that its continuing encouragement and instructions to perform those infringing acts would induce performance of the infringing acts by others, including customers. Despite that knowledge, and as evidence of its intent, Apple has refused to discontinue the inducing acts and refused to remove the infringing functionality from the Accused Infringing Devices.

25. Apple has also infringed, and continues to infringe, claims 1, 3, 5-6 and 12 of the '487 patent by offering to commercially distribute, commercially distributing, or importing the Accused Infringing Devices which devices are used in practicing the processes, or using the

systems, of the ’487 patent, and constitute a material part of the invention. For example, the Accused Infringing Devices include software for implementing a network with a first plurality of logic channels with which is associated a second plurality of transport channels, which transport channels arc provided for transmitting transport blocks formed from packet units of the logic channels (“Infringing Software”), which is packaged with other software in the Accused Infringing Devices. Apple knows that the Infringing Software is especially made or especially adapted for use in infringement of the ’487 patent, not a staple article, and not a commodity of commerce suitable for substantial non-infringing use. Apple is thereby liable for infringement of the ’487 Patent under 35 U.S.C. § 271(c).

26. Apple will have been on notice of its and its customers’ infringement of the ’487 Patent since, at the latest, the service of the original complaint upon it. By the time of trial, Apple will have known and intended (since receiving such notice) that its continued actions would actively induce and contribute to the infringement of claims 1, 3, 5-6 and 12 of the ’487 Patent.

27. Apple may have infringed the ’487 Patent through other software and devices utilizing the same or reasonably similar functionality, including other versions of the Accused Infringing Devices.

28. Uniloc has been damaged by Apple’s infringement of the ’487 Patent.

PRAYER FOR RELIEF

Uniloc requests that the Court enter judgment against Apple:

(A) declaring that Apple has infringed the ’487 Patent;

(B) awarding Uniloc its damages suffered as a result of Apple’s infringement of the ’487 Patent;

(C) awarding Uniloc its costs, attorneys' fees, expenses, and interest, and

(D) granting Uniloc such further relief as the Court finds appropriate.

Date: May 30, 2018

Respectfully submitted,

/s/ Kevin Gannon

Kevin Gannon
Massachusetts State Bar No. 640931
James J. Foster
Massachusetts State Bar No. 553285
Aaron Jacobs
Massachusetts State Bar No. 677545
PRINCE LOBEL TYE LLP
One International Place, Suite 3700
Boston, MA 02110
Tel: (617) 456-8000
Fax: (617) 456-8100
Email: kgannon@princelobel.com
Email: jfoster@princelobel.com
Email: ajacobs@princelobel.com

Edward R. Nelson III
ed@nelbum.com
Texas State Bar No. 00797142
Anthony M. Vecchione
anthony@nelbum.com
Texas State Bar No. 24061270
NELSON BUMGARDNER PC
3131 West 7th Street, Suite 300
Fort Worth, TX 76107
Tel: (817) 377-9111
Fax: (817) 377-3485

ATTORNEYS FOR THE PLAINTIFFS

CERTIFICATE OF SERVICE

I certify that all counsel of record who have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3) on May 30, 2018.

/s/ Kevin Gannon
Kevin Gannon