

ITU-T Telecommunication Standardization Sector
Study Group 15
Experts Group for Video Coding and Systems
in ATM and Other Network Environments

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Source: RAPPORTEUR FOR Q.2/15 IN ITU-T SG15(Sakae OKUBO)
Title: PATENT STATEMENTS AND INFORMATION FOR DRAFT ITU-T REC.
H.262 | ISO/IEC 13818-2
Purpose: Information

In accordance with the decision made at the SG15 meeting in September 1993, Rapporteur requested those organizations, which indicated holding relevant patents as in Annex F to the draft Recommendation H.262|ISO/IEC 13818-2, to submit patent licensing policy statements and to advise ITU-T of patent information.

The current submission is summarized in Table 1 and collected statements have been filed at ITU-TSB. A list of relevant patents are summarized in Table 2.

The ITU-T "code of practice" regarding the IPR matters is attached as Annex to this document.

Cooperation of the ITU-T and ISO/IEC JTC1/SC29/WG11 members are appreciated and further cooperation is requested.

END

Table 1 Summary of patent statement collection

* in the patent information column indicates that the statement is for general declaration of cooperation without identification of specific patents at this moment

Company	V	A	S	patent statement	patent information	Note
AT&T	X	X	X	June 7, 1994	June 7, 1994	
BBC Research Department				May 11, 1994	May 11, 1994	
Belgian Science Policy Office	X	X	X	Oct. 7, 1993	Oct. 7, 1993	
Bellcore	X			Nov. 3, 1993	Nov. 3, 1993	
BOSCH	X	X	X	June 6, 1994	June 6, 1994	
BT				April 27, 1994	advised later	
CCETT						
CSELT	X					
Columbia University				May 11, 1994	to be requested	
David Sarnoff Research Center	X	X	X	Oct. 29, 1993	* (to be confirmed)	
Deutsche Thomson-Brandt GmbH	X	X	X			
France Telecom CNET						
Fraunhofer Gesellschaft		X	X	-	-	
FUJITSU				April 27, 1994	April 27, 1994	new entry to Annex F
GC Technology Corporation	X	X	X	Apr. 30, 1994	Apr. 30, 1994	
General Instruments						
Goldstar				May 9, 1994	to be requested	
Hitachi, Ltd.				June 16, 1994	June 16, 1994	
International Business Machines Corporation	X	X	X			
IRT		X		-	-	
KDD	X			Apr. 28, 1994	Apr. 28, 1994	
Massachusetts Institute of Technology	X	X	X	Apr. 27, 1994	(under request)	
Matsushita Electric Industrial Co., Ltd.	X	X	X	June 22, 1994	to be requested	
Mitsubishi Electric Corporation				Oct. 22, 1993	(under request)	
National Transcommunications Limited						
NEC Corporation		X				
Nippon Hoso Kyokai	X			Apr. 28, 1994	*	
Nippon Telegraph and Telephone	X			Oct. 1, 1993	Oct. 1, 1993	
Nokia Research Center	X			Apr. 15, 1994	Apr. 15, 1994	
Norwegian Telecom Research	X			Apr. 28, 1994	*?	
OKI				Apr. 19, 1994	Apr. 19, 1994	
Philips Consumer Electronics	X	X	X	Dec. 21, 1993	to be requested	
Qualcomm Incorporated	X					
Royal PTT Nederland N.V., PTT Research (NL)	X	X	X	May 5, 1994	(under request)	
Samsung Electronics				May 9, 1994	advised later	
Scientific Atlanta	X	X	X	Oct. 22, 1994	to be requested	
Sharp Corporation				Apr. 22, 1994	Apr. 22, 1994	
Siemens AG	X			Feb. 22, 1994	Feb. 22, 1994	
Sony Corporation				May 30, 1994	to be requested	
Texas Instruments						
Thomson Consumer Electronics						
Toppan Printing Co., Ltd.				Jan. 25, 1994	*	
Toshiba Corporation	X			April 26, 1994	advised later	
TV/Com	X	X	X			
Victor Company of Japan Limited				Dec. 10, 1993	Nov. 15, 1993	

Table 2 Summary of patent information

Organization	Cntry	Patent #	Date	Title	Note
AT&T	US	4,383,272		Video Signal Interpolation Using Motion Estimation	
	US	4,958,226		Conditional Motion Compensated Interpolation of Digital Motion Video	
	US	5,227,878		Adaptive Coding and Decoding of Frames and Fields of Video	
BBC	issued in UK, pend. in US, JP,EU	GB 2 268 662	6.4.94	High definition television coder/decoder	essential to Systems Time Stamps
	issued in UK, pend. in US, JP,EU	GB 2197 152	May 90	Interpolating lines of video signals	essential to Spatial Scalable Profile
	pend. in UK	GB 2 242 097 A		Buffer resynchronisation in variable bitrate bit-rate-reduction codecs	implementation related
	issued in UK, pend. in US, JP,EU	GB 2 240 231	31.3.94	Implementation independent architecture for an HDTV bitrate-reduction codec	implementation related
	issued in UK	GB 2 238 444	Sept. 93	New proposals for buffer control of quantisation law	implementation related
	issued in UK	GB 2 238 445	Sept. 93	Improved measures of criticality for DCT block quantisation	implementation related
Belgian Science Policy Office	US	4.894.713			granted
	EP	88870098.6			to be granted in the near future
Bellcore	US			Spatially Scalable Video Coding facilitating the derivation of Variable Resolution Images	US patent allowed
	US	5,253,056		Spatial and Frequency Scalable Video Coding Facilitating the derivation of Variable Resolution Images	
	US			Spatially Scalable Video Encoding and Decoding	Recently filed
BOSCH	EP	279 053 B1		Verfahren zum Übertragen und Wiedergeben von Fernsehbildsequenzen	
	EP	368 151 A2		Verfahren zur Bestimmung von Suchpositionen zur Bewegungsschätzung	
	EP	368 139 A2		Verfahren zur Codierung von Restfehlerbildern	
	EP	346 653 A2		Bildcodierverfahren und Einrichtung	
	EP	346 637 B1		Verfahren zur Aufbereitung und Übertragung einer Bildsequenz	
	EP	346 636 A2		Verfahren zur Aufbereitung und Übertragung einer Bildsequenz	
	EP	439 675 A2		Verfahren zur Aufbereitung von Bilddaten	

	EP	283 715 B1		Verfahren zur Codierung von Bildsignalen	
FUJITSU LIMITED	JP	03-148981-A		Video signal coding apparatus, coding method used in the video signal coding apparatus and video signal coding transmission system having the video signal coding apparatus	
	JP	05-014392-A		An image encoding and transmitting systems	
GC Technology Corporation	JP	3-311911	Oct.30,1991	Interlaced image coding method and device	
Hitachi	US GB	4,985,784 2 215 555	Jan.15, 1991 Aug.19, 1992	Image data transfer method and apparatus therefor	
KDD	JP US GB	1668222 4,672,442 2162018	May.29,1992 Jun.9,1987 Dec.2,1987	FRAME RATE CONVERSION SYSTEM FOR VIDEO SIGNALS USING MOTION VECTORS	
	JP US	05-174687 08/084708	Jun.23,1993 Jun.25,1993	INTERLACED VIDEO SIGNAL MOTION COMPENSATION PREDICTION SYSTEM	
	JP	1835550	Apr.11,1994	MOTION COMPENSATION FOR VIDEO SIGNALS	Applied Japan only
	JP	03-291905	Oct.14,1991	EFFECTIVE VIDEO CODING SYSTEM	Applied Japan only
	JP	03-311510	Oct.31,1991	VIDEO SIGNAL MOTION COMPENSATION PREDICTION SYSTEM	Applied Japan only
NTT	JP	1-135370		High efficiency video coding equipment	
NOKIA	Finland EP	90179 92115750.9		Method for compression of digitally coded video image	
	Finland EP	915307 92119056.7		Method for the search of motion vectors for a video signal	
	Finland EP	915308 92119057.5		Method for the search of motion vectors for a video signal	
	Finland	933093		Method for the search of prediction block for motion compensated video signal	
OKI	JP	03-071862	Apr.4,1991	Intra Frame Encoder and Decoder	
SHARP CORPORATION	JP	02-237368-A	Sep.19,1990	IMAGE COMMUNICATION TERMINAL EQUIPMENT	
	JP US EP	05-56275-A 5,243,420	Mar.5,1993 Sep.7,1993 Aug.27,1991	IMAGE ENCODING APPARATUS AND IMAGE DECODING APPARATUS	
SIEMENS	EP US	0 201 679 46 72 441		Method for Image Data Reduction for Digital Video Signals	
	US JP	48 62 263 90 982/88		Apparatus for Optimized Weighting of Transmitted Transformation Coefficients...	
	EP EP	0 284 962 93112974.6		Method for Image Data Reduction for Digital Video Signals	
	US JP EP	49 22 341 10 9979/89 0 309 669		Method for Scene Model-Based Image Data Reduction for Digital Video Signals	

	EP US JP	0 474 636 51 68 357 50 5838/92		Method for Determining a Decision Result for an Image Data Reduction Method	
	WO	92/09173		Method for Adaptive Quantization for Data Reduction in Transmission of Digital Images	
Victor Company of Japan Limited	US JP EP	4,985,768 H2-214283 379,217		Intra-Frame Predictive Encoding System with Encoded and Transmitted Prediction Error	
	US JP EP	5,089,889 H2-288788 396,360		Apparatus for Inter-Frame Predictive Encoding of Video Signal	
	US JP	5,103,307 H3-216089		Intra-Frame Predictive Coding/Decoding System for Varying Interval between Independent Frames	

Statement on TSB patent policy

Over the years, the TSB has developed a "code of practice" regarding intellectual property rights (patents) covering, in varying degrees, the subject matters of ITU-T Recommendations*. The rules of this "code of practice" are simple and straightforward - Recommendations are drawn up by telecommunications and not patent experts; thus, they may not necessarily be very familiar with the complex international legal situation of intellectual property rights such as patents, etc.

ITU-T Recommendations are non-binding international standards. Their objective is to ensure compatibility of international telecommunications on a world-wide basis. To meet this objective, which is in the common interests of all those participating in international telecommunications (network and service providers, suppliers, users) it must be ensured that Recommendations, their applications, use, etc. are accessible to everybody. It follows therefore that a commercial (monopolistic) abuse by a holder of a patent embodied fully or partly in a Recommendation must be excluded. To meet this requirement in general is the sole objective of the TSB code of practice. The detailed arrangements arising from patents (licensing, royalties, etc.) are being left to the parties concerned, as these arrangements might differ from case to case.

This code of practice may be summarized as follows (it should be noted that ISO operates in a very similar way):

1. The TSB is not in a position to give authoritative or comprehensive information about evidence, validity or scope of patents or similar rights, but it is desirable that the fullest available information should be disclosed. Therefore, any ITU-T member organization putting forward a standardization proposal should, from the outset, draw the TSB attention to any known patent or to any known pending patent application, either their own or of other organizations, although the TSB is unable to verify the validity of any such information.
2. If an ITU-T Recommendation is developed and such information as referred to in paragraph 1 has been disclosed, three different situations may arise:
 - 2.1 The patent holder waives his rights; hence, the Recommendation is freely accessible to everybody, subject to no particular conditions, no royalties are due, etc.
 - 2.2 The patent holder is not prepared to waive his rights but would be willing to negotiate licenses with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations are left to the parties concerned and are performed outside the ITU-T.
 - 2.3 The patent holder is not willing to comply with the provisions of either paragraph 2.1 or paragraph 2.2; in such case, no Recommendation can be established.
3. Whatever case applies (2.1, 2.2 or 2.3), the patent holder has to provide a written statement to be filed at the TSB. This statement must not include additional provisions, conditions, or any other exclusion clauses in excess of what is provided for each case in paragraphs 2.1, 2.2 and 2.3.

* Formerly CCITT Recommendations.