

TSB
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No. 1613

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Dr. Th. Irmer  
Director  
Telecommunication Standardization Bureau  
Place de Nations, Ch-1211  
Geneva 20, Switzerland

Dear Dr. Irmer:

AT&T has been informed that your organization has produced recommendations in the area of speech coding technology. Several of these recommendations include technology for which AT&T has essential patents. The patent names, numbers and a list of countries where they are filed is shown in the attachment.

In accordance with paragraph 2.2 of the TSB Patent Policy, AT&T is not prepared to waive its patent rights, but would be willing to negotiate with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations will be held with the parties concerned and will be performed outside the ITU-TS.

Please contact our representative Tom Dodd (voice: +1 908 580 5924, fax +1 908 580 6026) concerning any licensing questions.

Sincerely,



James E. Lamar

Copy to: ITU Study Group 15  
AT&T Standards Secretariat

# AT&T Essential Patents Related to Speech Coding

## Attachment

### Contents:

- Section 1 Recommendation G.723
- Section 2 Recommendation G.728
- Section 3 Recommendation G.729
- Section 4 Patents Issued by Country

### 1. Recommendation G.723 (Note this number may change due to duplicate ITU number)

6.4 kb/s and 5.6 kb/s Dual-Rate Video Telecommunications Speech Coder - CELP Based

#### Essential AT&T Patents:

Atal-9  
Atal-12  
Jayant-9  
Ketchum-3

### 2. Recommendation G.728

Coding of Speech at 16 kb/s Using Low-Delay Code Excited Linear Prediction

#### Essential AT&T Patents:

Atal-9  
Jayant-9  
Chen-1  
Chen-7

### 3. Recommendation G.729

Coding of Speech at 8 kb/s Using Code Excited Linear Prediction

#### Essential AT&T Patents:

Atal-9  
Atal-12  
Jayant-9  
Ketchum-3

## AT&T Essential Patents Related to Speech Coding

### 4. Patents Issued by Country

#### **BS Atal 9-1**

#### **DIGITAL SPEECH CODER**

<u>COUNTRY</u>	<u>SERIAL/PATENT NUMBER</u>
Canada	1181854
France	8219772
Germany	3244476
Great Britain	2110906
Japan	1332758
Sweden	PUB456618
Sweden	4674298-6
USA	RE32580

#### **BS Atal 12**

#### **MULTIPULSE LPC SPEECH PROCESSING ARRANGEMENT**

<u>COUNTRY</u>	<u>SERIAL/PATENT NUMBER</u>
Belgium	0175752
Canada	1222568
France	0175752
Great Britain	0175752
Netherlands	0175752
Sweden	0175752
Germany	3575624
USA	4701954

#### **NS Jayant 9-1**

#### **PREDICTIVE COMMUNICATION SYSTEM FILTERING ARRANGEMENT**

<u>COUNTRY</u>	<u>SERIAL/PATENT NUMBER</u>
Austria	0192707
Australia	573035
Belgium	0192707
Canada	1252842
France	0192707
Germany	3574804
Great Britain	0192707
Italy	0192707

## AT&T Essential Patents Related to Speech Coding

NS Jayant 9-1

### **PREDICTIVE COMMUNICATION SYSTEM FILTERING ARRANGEMENT**

<u>COUNTRY</u>	<u>SERIAL/PATENT NUMBER</u>
Netherlands	0192707
Sweden	0192707
Switzerland	0192707
Taiwan	25083
USA	4617676

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### **A LOW DELAY CODE-EXCITED LINEAR PREDICTIVE CODING FOR SPEECH OR AUDIO SIGNALS**

<u>COUNTRY</u>	<u>SERIAL/PATENT NUMBER</u>
Austria	90300255.8
Australia	607363
Taiwan	042012

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### **CODE-EXCITED LINEAR PREDICTIVE CODING WITH LOW DELAY FOR SPEECH OR AUDIO SIGNALS**

<u>COUNTRY</u>	<u>SERIAL/PATENT NUMBER</u>
USA	5339384

RH Ketchum 3

### **CODE EXCITED LINEAR PREDICTIVE VOCODER USING VIRTUAL SEARCHING**

<u>COUNTRY</u>	<u>SERIAL/PATENT NUMBER</u>
Austria	0296764
Australia	595719
Belgium	0296764
France	0296764
Germany	3874427.9
Great Britain	0296764
Hong Kong	0296764

## AT&T Essential Patents Related to Speech Coding

**RH Ketchum 3      CODE EXCITED LINEAR PREDICTIVE VOCODER USING  
VIRTUAL SEARCHING**

<u>COUNTRY</u>	<u>SERIAL/PATENT NUMBER</u>
Italy	02967649
Netherlands	0296764
Singapore	103
Sweden	0296764
USA	4910781