

Patent Statement and Licensing Declaration

This declaration does not represent an implied license grant

G993-2-18

Please return to: Director
Telecommunication Standardization Bureau
International Telecommunication Union

Place des Nations
CH-1211 Geneva 20, Switzerland
Fax: +41 22 730 5853

Patent Holder/Organization:

Legal Name Texas Instruments Incorporated

Contact for license application:

Name & Department Robby Holland, Licensing Manager

Department

Address MS 3999
P. O. Box 660199
Dallas, Texas 75266 USA

Tel. +1-972-917-4367

Fax +1-972-917-4406

E-mail r-holland@ti.com

URL (optional)

ITU-T Recommendation:

Number ITU G.993.2

Title Very High Speed Digital Subscriber Line 2

Licensing declaration

The Patent Holder believes to hold granted patents and/or pending applications, whose use would be required to implement the above ITU-T Recommendation and hereby declares, in accordance with the Statement on ITU-T Patent Policy (see ITU-T website), that (check one box only).

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1 The Patent Holder is prepared to grant – on the basis of reciprocity for the above ITU-T Recommendation – a free license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and under other reasonable terms and conditions to make, use and sell implementations of the above ITU-T Recommendation.

Negotiations are left to the parties concerned and are performed outside the ITU-T.

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X

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3 The Patent Holder is unwilling to grant licenses according to the provisions of either 1 or 2 above. In this case, the following information must be provided as part of this declaration:

- patent registration/application number;
- an indication of which portions of the Recommendation are affected;
- a description of the patent claims covering the Recommendation.

TSB

M. NIYA

07 FEB 2006

CC. S. TRABULSI

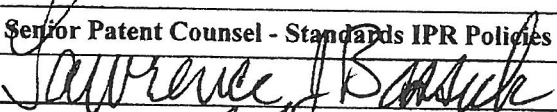
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No. 1180

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Reciprocity: As used herein, the word "reciprocity" means that the Patent Holder shall only be required to license any prospective licensee if such prospective licensee will commit to license its essential patent(s) or essential patent claim(s) for implementation of the same ITU-T Recommendation for free or under reasonable terms and conditions.

Signature

Organization	Texas Instrument Incorporated
Name of authorized person	Lawrence J. Bassuk
Title of authorized person	Senior Patent Counsel - Standards IPR Policies
Signature	
Place, Date	Dallas, Texas February 6, 2006

FORM: 10 JULY 2004

Patent Information (desired but not required)

No.	Registration Number/ Country	Title/ Inventor	Status [granted/ pending]
1	2003-0123560/US	Method to Mitigate Effects of ISDN Off/On Transitions in ADSL / Jacobsen, Krista S.; (San Jose, CA) ; Agah, Michael D.; (Monte Sereno, CA) ; Wiese, Brian R.; (San Francisco, CA)	pending
2	2005-0169358/US	Computationally and memory efficient tone ordering scheme/ Redfern, Arthur J.; (Plano, TX) ; Dasgupta, Udayan; (Irving, TX)	pending
3	2005-0169392/US	Efficient low-power mode for multicarrier communications / Redfern, Arthur J.; (Plano, TX)	pending
4	2005-0175078/US	Flexible initialization method for DSL communication systems / Redfern, Arthur J.; (Plano, TX)	pending
5	2005-0207482/US	DMT system with variable subchannel spacing in TCM ISDN noise / Redfern, Arthur J.; (Plano, TX)	pending
6	2005-0232308/US	Frame alignment and cyclic extension partitioning / Redfern, Arthur J.; (Plano, TX)	pending
7	2005-0232540/US	Spectrally flexible band plans with reduced filtering requirements / Redfern, Arthur J.; (Plano, TX) ; Ginis, Georgios; (Mountain View, CA) ; Mujica, Fernando A.; (Allen, TX) ; Jacobsen, Krista S.; (San Jose, CA)	pending
8	2005-0281346/US	Method and system of tone ordering for discrete multi-tone systems with tone grouping / Redfern, Arthur J.; (Plano, TX)	pending
9	2005-0286649/US	Using multiple pilot signals for timing error estimation in digital subscriber line communications / Redfern, Arthur J., (Plano, TX)	pending
10	5,400,322/US	Updating of bit allocations in a multicarrier modulation transmission system / Hunt; Ronald R. (San Jose, CA); Chow; Peter S. (Mountain View, CA)	granted
11	5,519,731/US	ADSL compatible discrete multi-tone apparatus for mitigation of T1 noise / Cioffi; John M. (Cupertino, CA)	granted
12	5,596,604/US	Multicarrier modulation transmission system with variable delay / Cioffi; John M. (Cupertino, CA); Tong; Po (Fremont, CA); Aslanis; James T. (Mountain View, CA); Gooch; Antoinette H. (Palo Alto, CA)	granted
13	5,673,290/US	ADSL compatible discrete multi-tone apparatus / Cioffi; John (Cupertino, CA)	granted
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