

FORM PTO-1449  U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use several sheets if necessary)	ATTY. DOCKET NO. I-2-0108US08	SERIAL NO. 12/901,616
	APPLICANT David K. Mesecher	
	FILING DATE October 11, 2010	GROUP 2611

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	<del>3,662,268</del>	<del>05/1972</del>	<del>Gans et al.</del>			
	4,736,460	04/1988	Rilling			
	<del>4,904,907</del>	<del>02/1990</del>	<del>Gilhouseen et al.</del>			
	<del>5,146,475</del>	<del>09/1992</del>	<del>Kubo</del>			
	<del>5,319,077</del>	<del>06/1994</del>	<del>Kim</del>			
	<del>5,331,666</del>	<del>07/1994</del>	<del>Dent</del>			
	<del>5,384,443</del>	<del>01/1995</del>	<del>Borth et al.</del>			
	<del>5,457,704</del>	<del>10/1995</del>	<del>Hoehner et al.</del>			
	<del>5,493,563</del>	<del>02/1996</del>	<del>Rezanaki et al.</del>			
	<del>5,623,511</del>	<del>04/1997</del>	<del>Bar David et al.</del>			
	<del>5,652,704</del>	<del>07/1997</del>	<del>Kanzaki et al.</del>			
	<del>5,673,294</del>	<del>09/1997</del>	<del>Namekata</del>			
	<del>5,680,419</del>	<del>10/1997</del>	<del>Bottomley</del>			
	<del>5,684,388</del>	<del>12/1997</del>	<del>Sawahashi et al.</del>			
	<del>5,757,701</del>	<del>05/1998</del>	<del>Kantorakis et al.</del>			
	<del>5,809,020</del>	<del>09/1998</del>	<del>Bruckert et al.</del>			
	<del>5,812,542</del>	<del>09/1998</del>	<del>Bruckert et al.</del>			
	<del>5,822,300</del>	<del>10/1998</del>	<del>Bottomley</del>			
	<del>5,822,701</del>	<del>10/1998</del>	<del>Tomisato et al.</del>			
	<del>5,886,987</del>	<del>03/1999</del>	<del>Yoshida et al.</del>			
	<del>5,903,834</del>	<del>05/1999</del>	<del>Wallstedt et al.</del>			
	<del>5,930,424</del>	<del>08/1999</del>	<del>Muto</del>			
	<del>5,952,068</del>	<del>08/1999</del>	<del>McDowell</del>			

1 Corresponds to CN 1166727A

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		<del>5,002,327</del>	<del>11/1999</del>	<del>Vock et al.</del>			
		<del>5,004,332</del>	<del>11/1999</del>	<del>Lemp et al.</del>			
		<del>6,009,074</del>	<del>12/1999</del>	<del>Kim et al.</del>			
		<del>6,020,130</del>	<del>02/2000</del>	<del>Rahmatullah et al.</del>			
		<del>6,044,120</del>	<del>03/2000</del>	<del>Bar David et al.</del>			
		<del>6,067,324</del>	<del>05/2000</del>	<del>Harrison</del>			
		<del>6,009,084</del>	<del>05/2000</del>	<del>Hayashi et al.<sup>2</sup></del>			
		<del>6,004,566</del>	<del>06/2000</del>	<del>Mohar et al.</del>			
		<del>6,108,517</del>	<del>08/2000</del>	<del>Arelan et al.</del>			
		<del>6,147,905</del>	<del>11/2000</del>	<del>Bar David et al.</del>			
		<del>6,148,041</del>	<del>11/2000</del>	<del>Dent</del>			
		<del>6,154,443</del>	<del>11/2000</del>	<del>Huang et al.</del>			
		<del>6,160,001</del>	<del>12/2000</del>	<del>Uchida et al.</del>			
		<del>6,161,200</del>	<del>12/2000</del>	<del>Mohor</del>			
		<del>6,245,762</del>	<del>04/2001</del>	<del>Dent</del>			
		<del>6,335,954</del>	<del>04/2002</del>	<del>Bottomley et al.</del>			
		<del>6,350,004</del>	<del>03/2002</del>	<del>Yoshida et al.</del>			
		<del>6,365,101</del>	<del>05/2002</del>	<del>Tsutsui et al.</del>			
/T.B./	*	6,385,187	05/2002	Ahn et al.			
		<del>6,434,366</del>	<del>08/2002</del>	<del>Harrison et al.</del>			
		<del>6,450,740</del>	<del>10/2002</del>	<del>Lo</del>			
		<del>6,470,047</del>	<del>10/2002</del>	<del>Kleinerman et al.</del>			
		<del>6,470,192</del>	<del>10/2002</del>	<del>Karlsson et al.</del>			
		<del>6,483,066</del>	<del>11/2002</del>	<del>Guzuki</del>			
		<del>6,484,285</del>	<del>11/2002</del>	<del>Dent</del>			

2 Corresponds to JP 10-107768

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		6,504,788	12/2002	Wang et al.			
		6,504,888	12/2002	Alamouti et al.			
/T.B./	*	6,542,471	04/2003	Ito			
		6,556,634	04/2003	Dent			
		6,636,495	10/2003	Tangemann			
		6,647,070	11/2003	Shalvi et al.			
		6,604,151	02/2004	Molnar et al.			
		6,607,441	02/2004	Bottomley et al.			
/T.B./	*	6,704,370	03/2004	Chheda et al.			
		6,731,700	05/2004	Yakhnich et al.			
/T.B./	*	6,791,960	09/2004	Song			
		6,870,825	03/2005	Huang			
		7,744,034	05/2010	Dabar et al.			
		2002/0150187	10/2002	Chugg et al.			
		2002/0154704	10/2002	Recher			
		2003/0013400	04/2003	Khatri			
		2003/0053524	03/2003	Dent			
		2003/0050929	03/2003	Cox et al.			
		2003/0002456	05/2003	Dent			
		2004/0000900	10/2004	Bottomley et al.			
		2002/0003846	04/2002	Khayrallah et al.			
		2002/0122510	05/2002	Yakhnich et al.			
		2002/0181430	12/2002	Thomao et al.			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	0-074-455	10/1994	EP				
	0-745-424	06/1996	EP				
	0-755-427	01/1997	EP				
	0-820-457	04/1998	EP				
	0-884-784	12/1998	EP				
	0-892-508	04/1999	EP				
	0-899-894	03/1999	EP				
	2-200-575	02/1995	GB				
	H09-264204	10/1997	JP <sup>3</sup>			X**	
	H11-486004	07/1999	JP <sup>4</sup>			X**	
	94/01956	01/1994	WO				
	95/34440	12/1995	WO				
	96/11533	04/1996	WO				
	96/21295	07/1996	WO				
	97/43386	04/1997	WO				
	99/04537	04/1999	WO				
	99/42283	03/1999	WO				
	99/23707	05/1999	WO				
	99/52311	10/1999	WO				
	00/35159	06/2000	WO				
	00/44444	07/2000	WO				
	00/48330	08/2000	WO				
	00/69192	11/2000	WO				

3 Corresponds to WO98/05860

4 Corresponds to US 6,507,605

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						YES	NO
	01/05000	01/2001	WO				
	01/20174	04/2001	WO				
	01/15280	06/2001	WO				
	02/00207	04/2002	WO				
	02/23787	03/2002	WO				
	02/065710	00/2002	WO				
	02/067444	08/2002	WO				
	02/004002	10/2002	WO				
	03/003604	01/2003	WO				
	03/010800	02/2003	WO				
	04/012341	02/2004	WO				

## OTHER DOCUMENTS

EXAMINER INITIAL	DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.)
	Foerster et al. "Coding for a Coherent DS-CDMA System Employing an MMSE Receiver in a Rayleigh Fading Channel," IEEE Transactions on Communications, Vol. 48, No. 6, June 2000, pp. 1012-1021.
	Latva-aho et al., "LMMSE Detection for DS-CDMA Systems in Fading Channels," IEEE Transactions on Communications, Vol. 48, No. 2, February 2000, 194-199.
	Majmundar et al., "Adaptive Single-User Receivers for Direct-Sequence Spread-Spectrum CDMA Systems," IEEE Transactions on Vehicular Technology, Vol. 49, No. 2, March 2000, pp. 379-389.
	Pahlavan et al., "Performance of Adaptive Matched Filter Receivers Over Fading Multipath Channels," IEEE Transactions on Communications, Vol. 38, No. 12, December 1990, pp. 2106-2113.
	THIRD GENERATION PARTNERSHIP PROJECT. "Technical Specification Group Radio Access Network: Physical layer procedures (TDD) (Release 1999)," 3GPP TS 25.224 V1.0.0 (April 1999).

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EXAMINER INITIAL	DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.)
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Physical layer procedures (TDD) (Release 1999)," 3GPP TS 25.224 V3.2.0 (March 2000).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Spreading and modulation (TDD) (Release 1999)," 3GPP TS 25.223 V2.1.0 (June 1999).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Spreading and modulation (TDD) (Release 1999)," 3GPP TS 25.223 V3.2.0 (March 2000).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Physical channels and mapping of transport channels onto physical channels (TDD) (Release 4)," 3GPP TS 25.221 V1.1.0 (June 1999).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Physical channels and mapping of transport channels onto physical channels (TDD) (Release 4)," 3GPP TS 25.221 V3.2.0 (March 2000).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Physical Channels and Mapping of Transport Channels onto Physical Channels (FDD) (Release 1999)," 3GPP TS 25.211 V2.1.0 (June 1999).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Physical Channels and Mapping of Transport Channels onto Physical Channels (FDD) (Release 1999)," 3GPP TS 25.211 V3.1.0 (December 1999).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Spreading and modulation (FDD) (Release 1999)," 3GPP TS 25.213 V2.1.0 (June 1999).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Spreading and modulation (FDD) (Release 1999)," 3GPP TS 25.213 V3.2.0 (March 2000).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Physical Layer Procedures (FDD) (Release 1999)." 3GPP TS 25.214 v3.2.0 (March 2000).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Physical Layer Procedures (FDD) (Release 1999)." 3GPP TS 25.214 v1.0.0 (April 1999).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Base Station (BS) radio transmission and reception (FDD)," 3GPP TS 25.104 V2.0.0 (June 1999).

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	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; Base Station (BS) radio transmission and reception (FDD)," 3GPP TS 25.104 V3.2.0 (March 2000).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; User Equipment (UE) radio transmission and reception (FDD)," 3GPP TS 25.101 V2.0.0 (June 1999).
	THIRD GENERATION PARTNERSHIP PROJECT, "Technical Specification Group Radio Access Network; User Equipment (UE) radio transmission and reception (FDD)," 3GPP TS 25.101 V3.2.2 (April 2000).

\*\* English abstract only.

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