

Program Schedule

International CES and Exhibits Thu-Sun, Jan. 5-8, 2006

ICCE Tutorials Sat-Sun, Jan. 7-8, 2006

ICCE Conference Mon-Wed, Jan. 9-11, 2006

Monday AM

SESSION 1.1: Audio Technology and Applications

Chairs: Jayant Datta; Ingvar Claesson

10:30 - PAPER NO. 1.1-1

CONTINUOUS MUSIC PLAYBACK BASED ON ITS CHORD-PROGRESSION CONTINUITY

SHINICHI GAYAMA, Pioneer Corporation, Japan

10:50 - PAPER NO. 1.1-2

QUICK AUDIO RETRIEVAL USING MULTIPLE FEATURES VECTOR

Se-Young Kim, Ki-Man Kim, Jae-Kuk Jeon, Dept. of Radio Sciences & Eng., Korea Maritime University, South Korea

11:10 - PAPER NO. 1.1-3

MOBILE COMMERCE FROM WATERMARKED BROADCAST AUDIO

Mikko Löytynoja, Nedeljko Cvejic, Anja Keskinarkaus, Eeva Lähetkangas, Tapio Seppänen, MediaTeam / University of Oulu, Finland

11:30 - PAPER NO. 1.1-4

EVALUATION OF A HANDS-FREE UNIT DURING DOUBLE-TALK

Wiklund Kenneth, Lindstrom Fredric, Konftel, Sweden; Claesson Ingvar, Blekinge Institute of Technolgy, Sweden

11:50 - PAPER NO. 1.1-5

A NOVEL DIGITAL AUDIO PROCESSING SCHEME BASED ON BIT EXPANSION ASYNCHRONOUS DIFFERING

Bernard Fong, Auckland University of Technology, New Zealand; Su-Ming Koh, A C M Fong, Nanyang Technological University, Singapore

SESSION 1.2: ATSC Equalization

Chair: Paul Snopko

10:30 - PAPER NO. 1.2-1

ROBUST DECISION-FEEDBACK EQUALIZATION WITH A NONCAUSAL FILTER FOR ATSC DTV RECEIVERS

Hyoung-Nam Kim, You-Seok Lee, Dept. of Electronics Engineering, Pusan National University, South Korea; Sung Ik Park, Seung Won Kim, ETRI, South Korea

10:50 - PAPER NO. 1.2-2

FREQUENCY-DOMAIN EQUALIZATION FOR DISTRIBUTED TERRESTRIAL DTV TRANSMISSION ENVIRONMENTS

Sang-Won Son, You-Seok Lee, Hyoung-Nam Kim, Dept. of Electronics Engineering, Pusan National University, South Korea; Sung Ik Park, ETRI, South Korea

11:10 - PAPER NO. 1.2-3

SPARSE EQUALIZER USING ADAPTIVE WEIGHT ACTIVATION FOR FAST START-UP IN ATSC DTV SYSTEMS

Hae-Sock Oh, Dong Seog Han, Chae-Hyun Lim, SCHOOL OF EE, KYUNGPOOK NATIONAL UNIV., South Korea; DoJun Rhee, SOC R&D Center, System LSI Division, Samsung Electronics Co., LTD, South Korea

11:30 - PAPER NO. 1.2-4

DECISION FEEDBACK EQUALIZER BASED ON TAP PARTITIONED KALMAN/LMS ESTIMATION FOR ATSC DTV APPLICATIONS

Dongwook Seo, Samsung Electronics, South Korea; Jongsoo Seo, Yonsei University, South Korea

11:50 - PAPER NO. 1.2-5

TERRESTRIAL DIGITAL TELEVISION RECEIVERS WITH BLIND ITERATIVE LINEAR CANCELLERS

Hossein Dehghan, Doradus Technologies, United States

SESSION 1.3: Human Computer Interaction: New Research and Results

Chairs: Jean Baronas; George Borden

10:30 - PAPER NO. 1.3-1

AUDITORY SYSTEM IN A PERSONAL ROBOT, PAPER0

Miki Sato, Akihiko Sugiyama, Shin'ichi Ohnaka, NEC Corporation, Japan

10:50 - PAPER NO. 1.3-2

TWO TV INTERFACES FOR ACCESSING CONTENTS AT EASE IN AN "ALWAYS-RECORDING" MULTI-CHANNEL SITUATION

Jun-ichiro Watanabe, Yujin Tsukada, Takaaki Ishii, Sergio Paolantonio, HITACHI Ltd., Japan

11:10 - PAPER NO. 1.3-3

MODEL BASED DATA COMPRESSION FOR 3D VIRTUAL HAPTIC TELEINTERACTION

Peter Hinterseer, Eckehard Steinbach, TU-Muenchen, Germany; Subhasis Chaudhuri, Indian Institute of Technology Bombay, India

11:30 - PAPER NO. 1.3-4

INFORMATION-ACCESSING FURNITURE TO MAKE OUR EVERYDAY LIVES MORE COMFORTABLE

Hiroko Sakeda, Youichi Horry, Yukinobu Maruyama, Takeshi Hoshino, Hitachi Human Interaction Lab., Japan

11:50 - PAPER NO. 1.3-5

EVALUATION OF A PROTOTYPE REMOTE CONTROL FOR DIGITAL BROADCASTING RECEIVERS BY USING SEMANTIC DIFFERENTIAL METHOD

Kazuteru Komine, Yasuhito Sawahata, Noriyoshi Uratani, NHK (Japan Broadcasting Corporation), Japan; Yukihiko Yoshida, NHK (Japan Broadcasting Corporation), Jordan; Kouichi Ishikawa, Tomoyuki Inoue, NHK (Japan Broadcasting Corporation), Japan

SESSION 1.4: H.264 Encoding

Chairs: Nam Ling; Michael Isnardi

10:30 - PAPER NO. 1.4-1

COMPLEXITY AND MEMORY REDUCTION FOR HIGH-QUALITY INTERLACE VIDEO CODING IN H.264/AVC

Kenji Takita, Youji Shibahara, Naoki Matsuda, Satoshi Sakaguchi, Shinya Kadono, Matsushita Electric Industrial Co, Ltd., Japan

10:50 - PAPER NO. 1.4-2

OPTIMIZED MOTION ESTIMATION AND MACROBLOCK MODE DECISION ALGORITHMS FOR H.264 VIDEO CODING AT LOW BIT-RATES

Khaleel Udyawar, Avinash Ramachandran, Saurabh Shandilya, Sandip Parikh, Sarnoff Innovative Technologies, India

11:10 - PAPER NO. 1.4-3

FAST MODE DECISION ALGORITHM FOR H.264 USING AZCB PREDICTION

yangsoo kim, samsung SDI, South Korea; yoonsik choe, Dept.of Electrical & Electronics Engineering, Yonsei Univ., South Korea; yungho choi, Dept. of Electircal Engineering, Konkuk Univ., South Korea

11:30 - PAPER NO. 1.4-4

AN EFFICIENT ALGORITHM FOR INTRA-PREDICTION IN H.264

Mean-Hom Ho, Jian-Jyun Hong, National Dong Hwa University, Taiwan

11:50 - PAPER NO. 1.4-5

ON THE PERFORMANCE OF A 3D FLEXIBLE MACROBLOCK ORDERING FOR H.264/AVC

Obianuju Ndili, Tokunbo Ogunfunmi, Santa Clara University, United States

Monday PM

SESSION 2.1: Authentication

Chairs: Akiomi Kunisa; Reinhard Moeller

2:40 - PAPER NO. 2.1-2

A SELF-LEARNING VIDEO-BASED FACE RECOGNITION SYSTEM

Dengpan Mou, Harman/Becker Automotive Systems GmbH, Germany

3:00 - PAPER NO. 2.1-3

AN XML-BASED AUTOMATED AUTHENTICATION PROFILE FOR HOME NETWORK BASED ON OSGI (OPEN SERVICE GATEWAY INITIATIVE) FRAMEWORK

Jongil Jeong, Donkyoo Shin, Dongil Shin, Sejong University, South Korea

3:20 - PAPER NO. 2.1-4

SECURE REMOTE USIM (UNIVERSAL SUBSCRIBER IDENTITY MODULE) CARD APPLICATION MANAGEMENT PROTOCOL FOR W-CDMA NETWORKS

Jeong-Jun Suh, Department of Electrical and Electronic Engineering, Yonsei University, South Korea; Jae-Hyung Joo, Samsung SDS, South Korea; Young Yong Kim, Department of Electrical and Electronic Engineering, Yonsei University, South Korea

3:40 - PAPER NO. 2.1-5

A LIGHTWEIGHT AND SECURE WIRELESS CERTIFICATE MANAGEMENT PROTOCOL SUPPORTING MOBILE PHONE

Yong Lee, Cornell University, United States; Jaell Lee, ChanJoo Chung, Korea Information Security Agency, South Korea; JooSeok Song, Yonsei University, South Korea

POSTER SESSION 2.2: P3 Networking 1

Chairs: Bernard Fong; Bill Rose

PAPER NO. 2.2-1

DOWNLOAD-BASED HOME NETWORK ADAPTER

Yoshiaki Koizumi, Takahiro Ito, Shigeki Suzuki, Yoshiko Ochiai, Noriyuki Kushiro, Mitsubishi Electric Corporation, Japan

PAPER NO. 2.2-2

RESIDENTIAL HDTV DISTRIBUTION SYSTEM USING UWB AND IEEE1394

Sangjae Lee, ETRI, South Korea

PAPER NO. 2.2-3

A MICRO OPTICAL WIRELESS MODULE FOR HIGH-DEFINITION IMAGES AND BROADBAND WIRELESS ACCESS

Masahisa SAKAI, Takayoshi SASAO, Kiroko YAMADA, Satoru TOGUCHI, Takashi IWAMOTO, JVC, Japan

PAPER NO. 2.2-4

PROTECTION OF MPEG-2 MULTICAST STREAMING IN IP-TV

Dowon Nam, Seongoun Hwang, Kisong Yoon, Electronics and Telecommunications Research Institute, South Korea

PAPER NO. 2.2-5

RELIABLE RIGHT MANAGEMENT SCHEME IN CABLE HOME NETWORK

eunjung kwon, ETRI, South Korea

PAPER NO. 2.2-6

ARCHITECTURE FOR INTEROPERABILITY OF SERVICES BETWEEN AN ACAP RECEIVER AND HOME NETWORKED DEVICES

Yuseok Bae, Bongjin Oh, Kyeongdeok Moon, ETRI, South Korea; Sangwook Kim, KNU, South Korea

PAPER NO. 2.2-7

SENSING INFORMATION MANAGING MECHANISM FOR CONTEXT AWARE SERVICE IN UBIQUITOUS HOME NETWORK

Seungho Baek, Eunchang Choi, Jaedoo Huh, Electronics and Telecommunications Research Institute, South Korea

PAPER NO. 2.2-8

MANAGEMENT SYSTEM FOR OSGI-BASED INFRASTRUCTURE

Kyuchang Kang, Jeunwoo Lee, ETRI, South Korea; Hoon Choi, Chungnam National University, South Korea

PAPER NO. 2.2-9

SEAMLESS QOS ADAPTATION CONTROL FOR EMBEDDED MULTIMEDIA COMMUNICATIONS

Hsu-Yang Kung, Yi-Fang Chang, Ching-Yu Lin, Department of Management Information Systems, National Pingtung University of Science and Technology, Taiwan

PAPER NO. 2.2-10

A UPNP COMPLIANT PVR APPLIANCE WITH 'LONG-TAIL' INTERNET-TV FUNCTIONALITY.

Frank Callaly, NUI, Galway, Ireland

PAPER NO. 2.2-11**A UNIQUE WAY OF PERSONALIZED AND SITUATIONAL SUPPORTS FOR UNIVERSAL ACCESS OF HOME APPLIANCE NETWORK**

Tomohiro Haraikawa, Shingo Nakagawa, Yasuomi Une, Yutaka Sakane, Yoichi Takebayashi, Shizuoka University, Japan

PAPER NO. 2.2-12**AN INNOVATIVE VIDEO PHONE SYSTEM IN DHCP NETWORK ENVIRONMENT**

Chao-Jung Chen, National Chaio Tung University, Taiwan

PAPER NO. 2.2-13**AN IMPLEMENTATION OF FTTH BASED HOME GATEWAY SUPPORTING VARIOUS SERVICES**

Sungil Nam, Changsic Choi, Younkwaee Jeong, Kwangroh Park, ETRI, South Korea

POSTER SESSION 2.3: Image/Video Processing I

Chairs: Phillip Dang; Anthony Ojo

PAPER NO. 2.3-1**A STUDY ON SELECTION OF VIDEO LEVELS COMPROMISING DYNAMIC FALSE CONTOUR AND GRAY SCALE RENDITION IN PDP**

Jung-Hwan Shin, Dae-Gon Jeon, School of Electronic & Electrical Engineering, Kyungpook National University, South Korea

PAPER NO. 2.3-2**LOW-POWER AUTO FOCUS ALGORITHM USING MODIFIED DCT FOR THE MOBILE PHONES**

Sang Yong Lee, Sang Soo Park, Chae Sung Kim, Korea university, South Korea; Yogendera Kumar, Korea university, India; Soo Won Kim, Korea university, South Korea

PAPER NO. 2.3-3**ROBUST FOCUS MEASURE FOR LOW-CONTRAST IMAGES**

Chun-hung Shen, Homer Chen, Graduate Institute of Communication Engineering, National Taiwan University, Taiwan

PAPER NO. 2.3-4**A NOVEL CMOS IMAGER WITH 2-DIMENSIONAL BINARIZATION AND EDGE DETECTION FOR HIGHLY INTEGRATED IMAGING SYSTEMS**

Pei-Yung Hsiao, Chia-Hao Lee, Chang Gung University, Taiwan; Chia-Chun Tsai, Nation Taipei University of Technology, Taiwan

PAPER NO. 2.3-5**SOC DESIGN OF AN AUTO-FOCUS DRIVING IMAGE SIGNAL PROCESSOR FOR MOBILE CAMERA APPLICATIONS**

Sung-Min Sohn, LG Electronics, South Korea

PAPER NO. 2.3-6**EDGE BASED ADAPTIVE KALMAN FILTERING FOR REAL-TIME VIDEO STABILIZATION**

Ohyun Kwon, IPIS, South Korea

PAPER NO. 2.3-7**MODELING AND ANALYSIS FOR OPTIMAL PVR IMPLEMENTATION**

Suwoon Jung, Dongho Lee, Hanyang University, South Korea

PAPER NO. 2.3-8**SECURITY CAMERA SYSTEM USING SHARPLY OUTLINED DISPLAY ALGORITHM AND VARIABLE-CLOCK CVBS ENCODER**

Ju-hyun Kim, Donga-A University, South Korea; Jooyoung Ha, Dong-A University, South Korea; Cheil-kyoo Lee, Shinki Jeong, ThinkChip LTD., South Korea; Bongsoon Kang, Dong-A University, South Korea

PAPER NO. 2.3-9**VISUAL VIDEO SUMMARIES POST-PROCESSING USING SUPERVISED AND UNSUPERVISED CLASSIFICATION**

Gianluigi Ciocca, Schettini Raimondo, DISCo, Università degli Studi di Milano Bicocca, Italy

PAPER NO. 2.3-10**WIDE BAND 3D Y/C SEPARATION CIRCUIT FOR PAL SYSTEM WITH REDUCED MEMORY SIZE**

Toshihiro Gai, Masaki Yamakawa, Mitsubishi Electric Corporation, Japan; Sohichiroh Higashi, Mitsubishi Electric Micro-computer Application Software Company, Japan; Tsuyoshi Inoue, Renesas Technology Corporation, Japan

PAPER NO. 2.3-11

EDGE-PRESERVING SPATIAL DEINTERLACING FOR STILL IMAGES USING BLOCK-BASED REGION CLASSIFICATION
SUNG-HO HONG, RAE-HONG PARK, Image Processing Lab., South Korea; SEUNGJOON YANG, Digital Media R&D Center,
Samsung Electronics Co., Ltd., South Korea; JUN-YONG KIM, Image Processing Lab., South Korea

SESSION 2.4: H.264 Implementation

Chairs: Michael Isnardi; Peter de With

2:20 - PAPER NO. 2.4-1

AN EFFICIENT VLSI ARCHITECTURE FOR H.264 SUB-PIXEL INTERPOLATION COPROCESSOR

Philip Dang, STMicroelectronics Inc., United States

2:40 - PAPER NO. 2.4-2 A H.264

VIDEO COPROCESSOR FOR MOBILE DVB-H TERMINALS

Kai-Immo Wels, Heiko Hübert, Fraunhofer Institut Nachrichtentechnik Heinrich-Hertz-Institut Berlin, Germany

3:00 - PAPER NO. 2.4-3

THREAD-PARALLEL MPEG-4 AND H.264 CODERS FOR SYSTEM-ON-CHIP MULTI-PROCESSOR ARCHITECTURES

Tom Jacobs, Vassilios Apostolos Chouliaras, David Mulvaney, Loughborough University, United Kingdom

3:20 - PAPER NO. 2.4-4

REAL TIME H.264 VIDEO ENCODER IMPLEMENTATION ON A PROGRAMMABLE DSP PROCESSOR FOR VIDEOPHONE APPLICATIONS

Shashi Kant, Mithun Uliyar, S S B K Gupta Pallapothu, Emuzed India Pvt. Ltd., India

3:40 - PAPER NO. 2.4-5

HARDWARE ASSISTED RATE DISTORTION OPTIMIZATION WITH EMBEDDED CABAC ACCELERATOR FOR THE H.264 ADVANCED VIDEO CODEC

Jose Nunez-Yanez, University of Bristol, United Kingdom

SESSION 3.1: Content Protection

Chairs: Akiomi Kunisa; Sharon Peng

4:20 - PAPER NO. 3.1-1

REVOCAION IN THE VIDEO CONTENT PROTECTION SYSTEM

Toine Staring, Boris Skoric, Philips Research, Netherlands

4:40 - PAPER NO. 3.1-2

OVERVIEW OF CONTENT PROTECTION TECHNOLOGY FOR AN INTELLIGENT ATTACHMENT DEVICE

Tatsuya Hirai, Hitachi, Ltd., Japan

5:00 - PAPER NO. 3.1-3

AN ACTIVE ENTITLEMENT KEY MANAGEMENT FOR CA SYSTEM ON DIGITAL TV BROADCASTING SYSTEM

Han-Seung Koo, O-Hyung Kwon, ETRI, South Korea; Sung-Woong Ra, Chung Nam National University, South Korea

5:20 - PAPER NO. 3.1-4

ADVANCED CONDITIONAL ACCESS SYSTEM FOR DIGITAL BROADCASTING RECEIVERS USING METADATA

Yusei Nishimoto, NHK, Japan

5:40 - PAPER NO. 3.1-5

MULTIMEDIA DIGITAL RIGHTS MANAGEMENT USING MODIFIED MOTION VECTOR FOR MOBILE DEVICE

Kyoung-Ho Kim, Goo-Rak Kwon, Tea-Young Lee, Korea University, South Korea; Moo-Rak Choi, LG Electronics Inc., South Korea; Sung-Jea Ko, Korea University, South Korea

SESSION 3.2: Middleware & Services

Chairs: Johan Lukkien; Bill Rose

4:20 - PAPER NO. 3.2-1

SECURE SERVICE DISCOVERY IN HOME NETWORKS

Johan Scholten, University of Twente, Netherlands

4:40 - PAPER NO. 3.2-2

DOMONET: A FRAMEWORK AND A PROTOTYPE FOR INTEROPERABILITY OF DOMOTICS MIDDLEWARES BASED ON XML AND WEBSERVICES

Vittorio Miori, Luca Tarrini, Maurizio Manca, Gabriele Tolomei, ISTI - CNR, Italy

5:00 - PAPER NO. 3.2-3

DESIGN AND IMPLEMENTATION OF A NET-ENABLED DTV USING DLNA FEATURES

Fernando Matsubara, Mitsubishi Electric Corp., Japan

5:20 - PAPER NO. 3.2-4

INTELLIGENCE SERVICE BINDING ARCHITECTURE FOR INTEROPERABILITY BETWEEN HOME NETWORK DEVICES

Seung-Ryun Lee, Kyungpook National University, South Korea

5:40 - PAPER NO. 3.2-5

MULTIMEDIA ROOM BRIDGE ADAPTER FOR SEAMLESS INTEROPERABILITY BETWEEN HETEROGENEOUS HOME NETWORK DEVICES

Myung Jin Lee, Kyungpook National University, South Korea

SESSION 3.3: Display Devices & Technologies

Chairs: Atul Batra; Kazuo Kuroda

4:20 - PAPER NO. 3.3-1

FLATBED-TYPE AUTOSTEREO SCOPIC DISPLAY SYSTEMS USING INTEGRAL IMAGING METHOD

yuzo hirayama, tatsuo saishu, rieko fukushima, kazuki taira, Corporate Research & Development Center, Toshiba Corporation, Japan

4:40 - PAPER NO. 3.3-2

ULTRA SMALL PROJECTOR WITH HIGH EFFICIENCY ILLUMINATION SYSTEM

Hideyuki Kanayama, SANYO Electric Co., Ltd., Japan

5:00 - PAPER NO. 3.3-3

EMERGING CELLULAR PHONE DISPLAY SERDES AND THEIR EMI FOOTPRINT

Wallace Ly, National Semiconductor Corporation, United States

5:20 - PAPER NO. 3.3-4

THE SUPPRESSION OF NOISE ON DITHERING IMAGE IN LCD OVERDRIVE

Jun Someya, Noritaka Okuda, Hiroaki Sugiura, Mitsubishi Electric Corporation, Japan

5:40 - PAPER NO. 3.3-5

HIGH CONTRAST AND EFFICIENT BLAZED GRATING LIGHT VALVE FOR FULL-HD 5,000 LUMEN LASER PROJECTORS

Hitoshi Tamada, Ayumu Taguchi, Kazunao Oniki, Sony Corporation, MSNC, GLV business development division, Japan; Yasuyuki Ito, Sony Corporation, SSNC, STDG, MEMS department, Japan

SESSION 3.4: Mobile Multimedia

Chair: Nam Ling

4:20 - PAPER NO. 3.4-1

APPLICATION-LAYER SEAMLESS HANDOVER FOR REAL-TIME COMMUNICATION SERVICE

Toru Yokoyama, Muneaki Yamaguchi, Kazuo Aisaka, Hitachi, Ltd., Japan

4:40 - PAPER NO. 3.4-2

EFFICIENT AUDIO/VIDEO SYNCHRONIZATION METHOD FOR VIDEO TELEPHONY SYSTEM IN CONSUMER CELL PHONES

Chanwoo Kim, LG Electronics, South Korea; Kwang-deok Seo, Yonsei Univ., South Korea

5:00 - PAPER NO. 3.4-3

POWER-AWARE RATE-CONTROL FOR QOS PROVISIONING OVER THE CDMA NETWORKS

Hye-Soo Kim, Duong Dinh Trieu, Korea University, South Korea; Jae-Woong Yun, LG Electronics, South Korea; Youn-Seon Jang, Electronics and Telecommunication Research Institute, South Korea; Sung-Jea Ko, Korea University, South Korea

5:20 - PAPER NO. 3.4-4**ARS: AN ADAPTIVE RECEPTION SCHEME FOR HANDHELD DEVICES SUPPORTING MOBILE VIDEO STREAMING SERVICES**

Jen-Wen Ding, Dept. of Information Management, National Kaohsiung University of Applied Sciences, Taiwan; Chin-Tsai Lin, Dept. of Information Management, Kun Shan University of Technology, Taiwan; Kai-Hsiung Huang, Dept. of Information Management, National Kaohsiung University of Applied Sciences, Taiwan

5:40 - PAPER NO. 3.4-5**THE SIMPLE AGGREGATION FORMAT FOR LIGHTWEIGHT APPLICATIONS SCENE REPRESENTATION (LASER)**

YeSun Joung, ETRI, South Korea; Young-kwon Lim, net&tv, South Korea; Won-Sik Cheong, Jihun Cha, Kyuheon Kim, ETRI, South Korea

Tuesday AM**SESSION 4.1: TV & Broadcasting Technology**

Chairs: Wayne Luplow; Erwin Bellers

09:00 - PAPER NO. 4.1-1**AVATAR: AN IMPROVED SOLUTION FOR PERSONALIZED TV BASED ON SEMANTIC INFERENCE**

Yolanda Blanco-Fernández, José J. Pazos-Arias, Martín López-Nores, Alberto Gil-Solla, Manuel Ramos-Cabrer, University of Vigo, Dept. of Telematic Engineering, Spain

09:20 - PAPER NO. 4.1-2**LOCATION BASED SERVICE BASED ON DIGITAL MULTIMEDIA BROADCASTING**

Youngho Jeong, Sammo Cho, Geon Kim, Chunghyun Ahn, Sooin Lee, ETRI, South Korea; Whanwoo Kim, Chungnam National University, South Korea

09:40 - PAPER NO. 4.1-3**A DTV-COMPATIBLE 3DTV BROADCASTING SYSTEM**

Kugjin Yun, Byungjun Bae, Sukhee Cho, Hoonjong Kang, Namho Hur, ETRI(Electronics and Telecommunications Research Institute), South Korea

10:00 - PAPER NO. 4.1-4**MOVIE EMOTIONAL EVENT DETECTION BASED ON MUSIC MOOD AND VIDEO TEMPO**

Yu-Hao Chen chen, Jin-Hau Kuo Kuo, Wei-Ta Chu Chu, Ja-Ling Wu Wu, CMLab, CSIE, NTU, Taiwan

SPECIAL SESSION 4.2: Coexist or Clash: Broadband over Powerline and PLC

Chairs: Jean Baronas; Uwe E. Kraus

09:00 - PAPER NO. 4.2-1**END-TO-END APPROACH TO THE DEVELOPMENT OF THE POWERLINE COMMUNICATION TECHNOLOGIES**

Oleg Loginov, Arkados, United States

09:20 - PAPER NO. 4.2-2**COEXISTENCE OF HIGH-SPEED POWERLINE COMMUNICATIONS APPLICATION THROUGH THE CONSUMER ELECTRONICS POWERLINE COMMUNICATION ALLIANCES (CEPCA)**

Michael Stelts, CEPCA, United States

09:40 - PAPER NO. 4.2-3**UPA PROPOSAL FOR THE COEXISTENCE OF PLC NETWORKS**

Victor Dominguez, Universal Powerline Association (UPA), United States

10:00 - PAPER NO. 4.2-4**IEEE P1901 STANDARD FOR BROADBAND OVER POWER LINE NETWORKS: MEDIUM ACCESS CONTROL AND PHYSICAL LAYER SPECIFICATIONS**

Jean-Philippe Faure, Ilevo - Schneider Electric Powerline Communications, France

10:20 - PAPER NO. 4.2-5**HIGH FREQUENCY BAND DISPERSED TONE POWER LINE COMMUNICATION MODEM FOR NETWORKED APPLIANCES**

Kazumasa Suzuki, Isamu Kawakami, Mitsubishi Electric Corp., Japan; Kenji Ogaki, Renesas Technology Corp., Japan

SESSION 4.3: Optical Disc

Chairs: Kei Yamashita; Sorin Stan

09:00 - PAPER NO. 4.3-1**A SMART MODEL HD DVD/DVD/CD COMPATIBLE PICKUP HEAD**

Kenji Nagatomi, Masahito Ogata, Kenji Asano, Yoichi Tsuchiya, Yasuyuki Bessho, Sanyo Electric Co., Ltd., Japan

09:20 - PAPER NO. 4.3-2**A NEWLY DEVELOPED SINGLE-CHIP LSI FOR HD DVD/DVD/CD**

Shogo Suzuki, Naofumi Ikuta, Miyuki Okamoto, Takanori Kishida, Toshitaka Kuma, Masato Fuma, Satoshi Noro, SANYO Electric Co., Ltd., Japan

09:40 - PAPER NO. 4.3-3**ADAPTIVE WRITE STRATEGY SELECTION MECHANISM FOR OPTICAL RECORDING SYSTEMS**

Venkata Ramana Vangala, Avinash Jayaraman, Philips Electronics Pte Ltd, Singapore, Singapore

10:00 - PAPER NO. 4.3-4**HD DVD PLAYER SOFTWARE ARCHITECTURE**

Kousuke Imoji, Takero Kobayashi, Yasuhiro Ishibashi, Toshiba, Japan; Kevin Collins, Microsoft, United States

10:20 - PAPER NO. 4.3-5**AN INNOVATED DVD MULTI-ANGLE CONTENT DEVELOPMENT AND A DESIRED DVD PLAYER**

Tomonari Tohara, Tokyo University of Agriculture and Technology, Japan; Joe Rice, Zane Vella, MX Entertainment, United States; Hironori Nakajo, Tokyo University of Agriculture and Technology, Japan

SESSION 4.4: Video Resolution & Format Conversion

Chairs: Christian Hentschel; Isao Kawahara

09:00 - PAPER NO. 4.4-1**A FAST VIDEO STITCHING METHOD FOR MOTION-COMPENSATED FRAMES IN COMPRESSED VIDEO STREAMS**

Tomoyuki Shimizu, Akio Yoneyama, Yasuhiro Takishima, KDDI R&D Laboratories Inc., Japan

09:20 - PAPER NO. 4.4-2**ADVANCES IN SUPER-RESOLUTION FOR HIGH QUALITY TELEVISION APPLICATIONS**

Roel Vliegen, Eindhoven University of Technology, Netherlands; Guido Volleberg, Philips Applied Technologies, Netherlands

09:40 - PAPER NO. 4.4-3**ADAPTIVE FORMAT CONVERSION OF VIDEOS USING WAVELETS**

Jayakanth Suyambukesan, nVidia, United States; Venkat Devarajan, University of Texas at Arlington, United States

10:00 - PAPER NO. 4.4-4**HIGH QUALITY, LOW COMPLEXITY IMAGE SCALER SUITABLE FOR RATIONAL FACTORS**

Christian Hentschel, Stefan Schiemenz, Brandenburg University of Technology Cottbus, Germany

10:20 - PAPER NO. 4.4-5**DIRECTIONAL AND MOTION-COMPENSATED DE-INTERLACING**

Erwin Bellers, Philips Semiconductors, United States

SESSION 5.1: Home Building Control

Chairs: Peter de With; Reinhard Moeller

11:00 - PAPER NO. 5.1-1**A NOVEL SYSTEM FOR REMOTE CONTROL OF HOUSEHOLD DEVICES USING DIGITAL IP PHONES**

Eric Burger, Brooktrout Technology, Inc., United States; Ophir Frieder, Illinois Institute of Technology, United States

11:20 - PAPER NO. 5.1-2**DESIGN OF A QUIET-COMFORT HEADBOARD**

Sen M. Kuo, Ravi Kishore Yenduri, Northern Illinois University, United States

11:40 - PAPER NO. 5.1-3

DESIGN OF A SIP-BASED REAL-TIME VISITOR CONVERSATION AND DOOR CONTROL ARCHITECTURE USING A HOME GATEWAY

Yeon-Joo Oh, Eui-Hyun Paik, Kwang-Roh Park, Electronics and Telecommunications Research Institute, South Korea

12:00 - PAPER NO. 5.1-4

DESIGN AND IMPLEMENTATION OF THE HOME SERVICE DELIVERY AND MANAGEMENT SYSTEM BASED ON OSGI SERVICE PLATFORM

Taein Hwang, Hojin Park, ETRI, South Korea; Jin Wook Chung, SungKyunKwan University, South Korea

SESSION 5.2: Topics in Wireless PAN/LAN

Chairs: Uwe E. Kraus; Bernard Fong

11:00 - PAPER NO. 5.2-1

ON THE ARCHITECTURE OF A ROBUST MULTI-PATH SEARCHER FOR WCDMA SYSTEMS

Chun-Chyuan Chen, Chien-Chin Chen, Jiun-Ming Wu, National Dong Hwa University, Taiwan

11:20 - PAPER NO. 5.2-2

AFORE: AN IFFT/FFT CORE GENERATION TOOL FOR DIFFERENT WIRELESS COMMUNICATION STANDARDS

Ainhoa Cortés, Igone Vélez, Juan F. Sevillano, Andoni Irizar, CEIT, Spain

11:40 - PAPER NO. 5.2-3

THE V2.0+EDR BLUETOOTH SOC ARCHITECTURE FOR MULTIMEDIA

Jeonghun Kim, Korea Univ./Mewtel Inc., South Korea; Tashyeon Sim, Youngwhan Choi, Jungwon Jeong, Taesik Bang, Mewtel Inc., South Korea; Suki Kim, Korea Univ, South Korea

12:00 - PAPER NO. 5.2-4

CHAOTIC-OOK UWB MODEM USING NEW UNIPOLAR ZCD CODES FOR WIRELESS PAN

Jaesang Cha, Jaeho Jeong, Seokyeong Univ., South Korea

SESSION 5.3: Digital Video Recording

Chairs: Kei Yamashita; Sorin Stan

11:00 - PAPER NO. 5.3-1

CHAPTER GENERATION FOR DIGITAL VIDEO RECORDER BASED ON PERCEPTUAL CLUSTERING

Masaki Yamauchi, Masayuki Kimura, Jun Omiya, Eiji Fukumiya, Junji Nishikawa, Matsushita Electric Industrial Co., Ltd., Japan

11:20 - PAPER NO. 5.3-2

AN ARCHITECTURE FOR VIDEO SUMMARIZATION SERVICES OVER HOME NETWORKS AND THE INTERNET

Samuel Shipman, Ajay Divakaran, Regunathan Radhakrishnan, Mitsubishi Electric Research Labs, United States

11:40 - PAPER NO. 5.3-3

LINKING TV PROGRAMS WITH INTERNET CONTENTS BASED ON VIDEO FINGERPRINTING

Eiji Kasutani, Kota Iwamoto, Akio Yamada, NEC, Japan

12:00 - PAPER NO. 5.3-4

A CHANNEL RECOMMENDATION SYSTEM IN MOBILE ENVIRONMENT

Sungjoon Park, Kongju Communication and Arts College, South Korea; Sanggil Kang, The University of Suwon, South Korea; Young-Kuk Kim, Chungnam National University, South Korea

SESSION 5.4: Artifact Reduction & Error Concealment

Chairs: Masaru Sakurai; Erwin Bellers

11:00 - PAPER NO. 5.4-1

MASKING CODING ARTIFACTS ON LARGE DISPLAYS

Frank van Heesch, Michiel Klompenhouwer, Gerard de Haan, Philips, Netherlands

11:20 - PAPER NO. 5.4-2

REDUCTION OF CODING ARTIFACTS USING CHROMINANCE AND LUMINANCE SPATIAL ANALYSIS

Ihor Kirenko, Philips Research Laboratories, Netherlands

11:40 - PAPER NO. 5.4-3**OPTIMIZED TEMPORAL ERROR CONCEALMENT THROUGH PERFORMANCE EVALUATION OF MULTIPLE CONCEALMENT FEATURES**

Dimitris Agrafiotis, Dave Bull, Nishan Canagarajah, University of Bristol, United Kingdom

12:00 - PAPER NO. 5.4-4**SPATIO-TEMPORAL FILTER WITH ADAPTIVE MULTIPLE OUTLIERS REJECTER**

Angelo Bosco, Arcangelo Bruna, Ivana Guarneri, Alessandro Capra, STMicroelectronics, Italy

Tuesday PM**POSTER SESSION 6.1: Remarkable CE Technologies**

Chairs: Reinhard Moeller; George Borden

PAPER NO. 6.1-1**FAST DECODER DESIGN OF CONNECTED WORD SPEECH RECOGNITION FOR AUTOMOBILE NAVIGATION SYSTEM**

Seokyeong Jeong, Hanseok Ko, Korea University, South Korea; Kyoung Won Min, Korea Electronics Technology Institute, South Korea

PAPER NO. 6.1-2**AR-BASED INDOOR NAVIGATION SYSTEM FOR PERSONAL LOCATING**

JongBae Kim, JungMe Lee, HeeSung Jun, University of Ulsan, South Korea

PAPER NO. 6.1-3**COMPUTER SIMULATION SYSTEM FOR THREE-DIMENSIONAL SPECKLE-SHIFT HOLOGRAM'S RECORDING**

Eriko Kubota, Kazuhiro Yamaguchi, Kei Kumagai, Satoshi Takahashi, Manabu Yamamoto, Tokyo University of Science, Japan

PAPER NO. 6.1-4**JGL ES - A J2ME-BASED 3D LIBRARY FOR MOBILE DEVICES**

Bing-Yu Chen, Cheng-Han Tu, National Taiwan University, Taiwan

PAPER NO. 6.1-5**AN INPUT METHOD USING HAND GESTURES FOR A PORTABLE REMOTE CONTROLLER FOR CONSUMER USE**

Morimasa Matsuda, Mitsubishi Electric Microcomputer Application Software Co. Ltd, Japan; Takako Nonaka, High-Technology Research Center at Ryukoku, Japan; Tomohiro Hase, Ryokoku University, Japan

PAPER NO. 6.1-6**COPYRIGHT PROTECTION THROUGH FEATURE-BASED WATERMARKING USING SCALE-INVARIANT KEYPOINTS**

Hae-Yeoun Lee, Heung-Kyu Lee, Korea Advanced Institute of Science and Technology, South Korea

PAPER NO. 6.1-7**DATA HIDING METHOD FOR BROADCASTING SYSTEM**

Jian Zhang, Xiaobing Sun, Kanzo Okada, Sony Electronics (Singapore) Pte Ltd, Singapore Research Laboratory, Singapore

PAPER NO. 6.1-8**AN AGENT-BASED CONTEXT-AWARE SYSTEM ON HANDHELD COMPUTER**

Hyung Jik Lee, ETRI, South Korea

PAPER NO. 6.1-9**AN INTERFACE FOR MULTIPLE AGENTS ON SHARED 3D DISPLAY**

Byung-Tae Jang, Jeong-dan Choi, ETRI, South Korea

PAPER NO. 6.1-10**REAL-TIME DETECTING SYSTEM OF THE DRIVER'S FATIGUE**

Jie Yang, Wuhan University of Technology, China

PAPER NO. 6.1-11**CONTENT DISTRIBUTION SYSTEM BASED ON MPEG-4 ISMACRYP IN SET-TOP BOX ENVIRONMENT**

Sang-ho Park, Jaewoong Jeong, Taekyoung Kwon, Sejong Univ., South Korea

PAPER NO. 6.1-12**SLIM-TYPE SPEAKER FOR FLAT-PANEL TELEVISIONS**

Hiroyuki Takewa, Matsushita Electric Industrial Co Ltd., Japan; Shuji Saiki, Matsushita Electric Industrial Co., Ltd., Japan; Sawako Kano, Matsushita Electric Industrial Co., Ltd., Japan; Atsushi Inaba, Panasonic Electronic Devices Co., Ltd., Japan

PAPER NO. 6.1-13**EMBEDDED SECURITY CONTROL ARCHITECTURE FOR UBIQUITOUS RFID HEALTHCARE INFORMATION SYSTEM**

Won Jay Song, ICU, South Korea

PAPER NO. 6.1-14**MULTIPURPOSE LOGO EMBEDDING METHOD FOR COPYRIGHT PROTECTION AND AUTHENTICATION**

Yoon-Hee Choi, Tae-Sun Choi, Gwangju Institute of Science and Technology, South Korea

PAPER NO. 6.1-16**DUAL CHANNEL BASED SPEECH ENHANCEMENT USING NOVELTY FILTER FOR ROBUST SPEECH RECOGNITION IN AUTOMOBILE ENVIRONMENTS**

Jounghoon Beh, Robert Baran, Hanseok Ko, Department of Electronics and Computer Engineering, Korea University, South Korea

PAPER NO. 6.1-17**MPEG-7 OVER MPEG-4 SYSTEMS DECODER FOR USING METADATA**

MyungSeok Ki, Kyuheon Kim, ETRI, South Korea

PAPER NO. 6.1-18**RESEARCH AND IMPLEMENTATION ON THE MOBILE INTELLIGENT CONTROLLER FOR CONSUMER ELECTRONICS**

Jonghwa Choi, Dongkyoo Shin, Dongil Shin, Sejong University, South Korea

SESSION 6.2: Home Network Management

Chairs: Ed Barrett; J.J. Lukkien

2:40 - PAPER NO. 6.2-1**HOME NETWORK REMOTE CONTROLLER USING THE APPLIANCE INTEGRATED SCRIPT ENGINE**

Naoki Shimizu, Yoshihiro Otsuka, Riko Yagiu, Mitsubishi Electric Corporation, Japan

3:00 - PAPER NO. 6.2-2**USB-BASED HOME CONTROL SYSTEM USING OSGI**

Hee-Sun Kim, Chang-Goo Lee, Chonbuk National Univ., South Korea

3:20 - PAPER NO. 6.2-3**AN INTEGRATED HOME SERVER FOR COMMUNICATION, BROADCASTING, AND HOME AUTOMATION**

Intark Han, ETRI, South Korea; Hong-Shik Park, Information and Communication University, South Korea; Youn-Kwae Jeong, Kwang-Roh Park, ETRI, South Korea

3:40 - PAPER NO. 6.2-4**CONTROLLING THE SMART HOME FROM TV**

Manuel Ramos-Cabrer, Rebeca Diaz-Redondo, Ana Fernandez-Vilas, Jose Pajos-Arias, University of Vigo, Spain

POSTER SESSION 6.3: Multimedia

Chairs: Martin Bolton; Bernard Fong

PAPER NO. 6.3-1**THE MPEG-4 BSAC AUDIO DECODER IMPLEMENTATION IN TERRESTRIAL DMB RECEIVER**

Sukho Lee, ETRI, South Korea

PAPER NO. 6.3-2**DEVELOPMENT OF EXTENDED T-DMB PLATFORM BASED ON WIPI FOR INTERACTIVE MOBILE BROADCASTING SERVICES**

Byungjun Bae, Woosuk Kim, Choonhyun Ahn, Soo In Lee, ETRI, South Korea; Kyu-Ik Sohng, Kyungpook National University, South Korea

PAPER NO. 6.3-3

IMPLEMENTATION OF A DIGITAL CONVERGENCE PLATFORM FOR FUTURE HOME MULTIMEDIA APPLIANCES

Hwa-Yong Oh, Eun-Seo Lee, Dong-Hwan Kim, Tae-Gyu Chang, Chung-Ang University, South Korea

PAPER NO. 6.3-4**AUDIO/VIDEO PROCESSING FOR SINGLE-CHIP T-DMB DECODER**

Nak-Woong EUM, ETRI, South Korea

PAPER NO. 6.3-5**A LOW POWER MULTIMEDIA SYSTEM BASED ON THE MICROSCOPIC DYNAMIC VOLTAGE SCALING (DVS)**

BYOUNG-IL KIM, Chung-Ang University, South Korea

PAPER NO. 6.3-6**OBJECT-BASED INTERACTIVE MULTIMEDIA STREAMING PLATFORM USING OVERLAY NETWORKS**

Hyun-Cheol Kim, Kyuheon Kim, ETRI, South Korea; Charalampos Patrikakis, Nikos Minogiannis, National Technical University of Athens, Greece; Mihaela van der Schaar, University of California Davis, United States

SESSION 6.4: DTV Decoder Architectures

Chairs: Phillip Dang; Peter de With

2:40 - PAPER NO. 6.4-1**SYSTEM ASPECTS FOR BROADCAST TV RECEPTION IN MOBILE PHONES**

Marcin Klecha, Philips Semiconductors, Netherlands

3:00 - PAPER NO. 6.4-2**A DSP BASED IP SET-TOP BOX FOR HOME ENTERTAINMENT**

Fernando Pescador, Universidad Politecnica de Madrid, Spain; César Sanz, Matías J. Garrido, Universidad Politécnica de Madrid, Spain; Carlos Santos, SIDSA (Semiconductores Investigación y Diseño S A), Spain; Rafael Antoniello, Javier Iglesias, Universidad Politécnica de Madrid, Spain

3:20 - PAPER NO. 6.4-3**REAL-TIME CAROUSEL CACHING AND MONITORING IN DATA BROADCASTING**

Dong-Hwan Park, Tai-Yeon Ku, Kyeong-Deok Moon, ETRI, South Korea

3:40 - PAPER NO. 6.4-4 3D**AUDIO-VIDEO PROCESSING ON THE TERRESTRIAL DMB**

Sukhee Cho, Kugjin Yun, Namho Hur, Soo-In Lee, ETRI, South Korea

SESSION 7.1: Audio Coding

Chairs: Fredric Lindstrom; Ingvar Claesson

4:20 - PAPER NO. 7.1-1**DSP IMPLEMENTATION OF THE 3GPP ENHANCED AACPLUS DECODER**

Osamu Shimada, Toshiyuki Nomura, Akihiko Sugiyama, Masahiro Serizawa, NEC Corporation, Japan

4:40 - PAPER NO. 7.1-2**ACCELERATING SPEECH CODING STANDARDS THROUGH SYSTEMC-SYNTHESIZED SIMD AND SCALAR ACCELERATORS**

Konstantia Koutsomyti, Vassilios Apostolos Chouliaras, Simon Parr, Loughborough University, United Kingdom; Jose Luis Nunez-Yanez, Bristol University, United Kingdom; Sekharjit Datta, Loughborough University, United Kingdom

5:00 - PAPER NO. 7.1-3**INVESTIGATION AND COMPLEXITY ANALYSIS OF A SPATIAL AUDIO CODEC BASED ON A PROGRAMMABLE MEDIA-PROCESSOR**

Chia-Hao Chang, National Taiwan University, Taiwan

5:20 - PAPER NO. 7.1-4**HARDWARE ACCELERATING AUDIO CODING ALGORITHMS**

Frank Mayer, Daniel Dalquen, Thomas Dettbarn, Fraunhofer IIS, Germany

5:40 - PAPER NO. 7.1-5

A NEW SPECTRAL ENHANCEMENT ALGORITHM IN MP3 AUDIO

Kyunghwa Park, Sanghun Oh, Wonjoong Yoon, Dankook University, South Korea

SESSION 7.2: Improvements in OFDM-based LAN

Chair: Uwe E. Kraus

4:20 - PAPER NO. 7.2-1**A NOVEL PAPR REDUCTION SCHEME FOR OFDM SYSTEMS: SELECTIVE MAPPING OF PARTIAL TONES (SMOPT)**

Seungsoo Yoo, Konkuk University, South Korea; Seokho Yoon, Sungkyunkwan University, South Korea; Ickho Song, KAIST, South Korea; Sun Yong Kim, Konkuk University, South Korea

4:40 - PAPER NO. 7.2-2**MINIMIZATION OF THE PAPR OF OFDM FOR WIRELESS LAN**

SEOG GEUN KANG, GYEONGSANG NATIONAL UNIVERSITY, South Korea

5:00 - PAPER NO. 7.2-3**IMPROVED SYMBOL TIMING SYNCHRONIZATION FOR IEEE 802.11A/G WIRELESS LAN SYSTEMS IN MULTIPATH CHANNELS**

Jooyeol Yang, Kyungwhoon Cheun, POSTECH, South Korea

5:20 - PAPER NO. 7.2-4**JOINT TWIN-CELL DETECTION FOR SPREAD SPECTRUM CODE ACQUISITION IN THE PRESENCE OF FRACTIONAL DOPPLER FREQUENCY OFFSET**

Kyunghwa Jung, Konkuk University, South Korea; Seokho Yoon, Sungkyunkwan University, South Korea; Sun Yong Kim, Konkuk University, South Korea; Ickho Song, Korea Advanced Institute of Science and Technology (KAIST), South Korea

5:40 - PAPER NO. 7.2-5**IMPLEMENTATION OF SYNCHRONIZATION FOR 2X2 MIMO WLAN SYSTEMS**

Hsin-Lei Lin, Chia-Chen Hsu, Robert C. Chang, Department of Electrical Engineering, National Chung Hsing University, Taiwan

SPECIAL SESSION 7.3: Video Browsing

Chairs: Ajay Divakaran; Dirk Farin

4:20 - PAPER NO. 7.3-1**AN ENHANCED VIDEO SUMMARIZATION SYSTEM USING AUDIO FEATURES FOR A PERSONAL VIDEO RECORDER**

Isao Otsuka, Mitsubishi Electric Corporation, Japan; Regunathan Radhakrishnan, Michael Siracusa, Ajay Divakaran, Mitsubishi Electric Research Laboratories, United States; Hidetoshi Mishima, Mitsubishi Electric Corporation, Japan

4:40 - PAPER NO. 7.3-2**FRAMEWORK FOR CONTEXT-BASED FILM RECOMMENDATION SYSTEM**

Masaru Sugano, KDDI R&D Laboratories Inc., Japan

5:00 - PAPER NO. 7.3-3**BROWSING VIDEO RECORDINGS USING MOVIE-IN-A-MINUTE**

Weda Hans, Barbieri Mauro, Philips Research The Netherlands, Netherlands; Dimitrova Nevenka, Philips Research USA, United States

5:20 - PAPER NO. 7.3-4**SPORTS VIDEO PERSONALIZATION FOR CONSUMER PRODUCTS**

Changsheng Xu, Institute for Infocomm Research, Singapore

5:40 - PAPER NO. 7.3-5**USER-CENTRIC AND REMOTE CONTENT BROWSING FOR MOBILE DEVICES**

Sang-Kyun Kim, Samsung Advanced Institute of Technology, South Korea

SESSION 7.4: Topics in Video Processing

Chairs: Erwin Bellers; Christian Hentschel

4:20 - PAPER NO. 7.4-1

ADVANCED DEMOSAICING METHODS BASED ON THE CHANGES OF COLORS IN A LOCAL REGION

Shotaro Moriya, Junko Makita, Tetsuya Kuno, Narihiro Matoba, Hiroaki Sugiura, Mitsubishi Electric Corporation, Japan

4:40 - PAPER NO. 7.4-2**DYNAMIC RANGE OPTIMIZATION BY LOCAL CONTRAST CORRECTION AND HISTOGRAM IMAGE ANALYSIS**

Alessandro Capra, Alfio Castorina, ST Microelectronics, Italy; Silvia Corchs, Francesca Gasparini, Raimondo Schettini, Università degli studi di Milano-Bicocca, Italy

5:00 - PAPER NO. 7.4-3**A BRIGHTNESS ADJUSTMENT METHOD FOR MPEG-2 COMPRESSED VIDEO EDITING**

Kebin An, Shanghai Jiaotong University, China; Jun Sun, Weina Du, Shanghai JiaoTong University, China

5:20 - PAPER NO. 7.4-4**REALIZING SMPTE-C STANDARD COLORS ON TV DISPLAY WITH NON-STANDARD PRIMARIES**

Ning Xu, Yeong-Taeg Kim, DMS Lab, Samsung SISA, United States

5:40 - PAPER NO. 7.4-5**MOTION ESTIMATION AND TEMPORAL UP-CONVERSION ON THE TM3270 MEDIA-PROCESSOR**

Jan-Willem Van de Waerdt, Erwin Bellers, Philips Semiconductors, United States

Wednesday AM**SESSION 8.1: Network Technology & Protocols**

Chairs: Stu Lipoff; Ed Barrett

09:00 - PAPER NO. 8.1-1**CLOCK TIME SYNCHRONIZATION FOR WIRELESS 1394 HETEROGENEOUS NETWORKS**

Seong-hee Lee, ETRI, South Korea

09:20 - PAPER NO. 8.1-2**CLUSTER BASED SELF-ORGANIZATION MANAGEMENT PROTOCOLS FOR WIRELESS SENSOR NETWORKS**

Yao-Chung Chang, Zhi-Sheng Lin, Jiann-Liang Chen, National Dong Hwa University, Taiwan

09:40 - PAPER NO. 8.1-3**HIPERMAC: HIERARCHICALLY-PAIRED EVOLUTIONARY RADIO MAC PROTOCOL FOR UBIQUITOUS WIRELESS SENSOR APPLICATIONS**

Ki Seok Chang, Chung Gu Kang, Department of Radio Communications Engineering, Korea University, South Korea; Il Hwan Kim, Korea University, South Korea; Yong Suk Kim, SAMSUNG Advanced Institute of Technology (SAIT), South Korea

10:00 - PAPER NO. 8.1-4**NEW ARCHITECTURE SUPPORTING PLUG AND PLAY OF SERVICE MODULES FOR A HOME NETWORK SYSTEM WITH FLEXIBLE EXPANDABILITY**

Haoming Shen, Sanyo electric Co., Ltd., Japan

10:20 - PAPER NO. 8.1-5**AUTOMATIC SELECTION OF A VISITED NETWORK IN MOBILE IPV6**

Mariana Simons-Nikolova, Philips Research, Netherlands; Xuemei Bodlaender-Pu, PhilipsTASS, Netherlands

SESSION 8.2: OFDM Signal Processing

Chairs: Paul Snopko; Uwe E. Kraus

09:00 - PAPER NO. 8.2-1**IMPROVING INFLUENCE OF IMPULSE NOISE TO OFDM SIGNAL BY RECOVERING TIME DOMAIN SAMPLES**

Tatsuya Hirakawa, Department of Applied Electronics, Tokyo University of Science, Japan

09:20 - PAPER NO. 8.2-2**IMPROVING DETECTION PERFORMANCE OF PRE-CODED STBC OFDM BY RE-GENERATING PRE-CODED SYMBOLS**

Hiroyuki Horii, Department of Applied Electronics, Tokyo University of Science, Japan

09:40 - PAPER NO. 8.2-3**NOISE REDUCTION FOR INTERPOLATIONS BASED ON PILOT-BLOCK AVERAGING IN DVB-T RECEIVERS**

You-Seok Lee, Hyoung-Nam Kim, Dept. of Electronics Engineering, Pusan National University, South Korea; Sung Ik Park, ETRI, South Korea

10:00 - PAPER NO. 8.2-4

USING DIVIDE-AND-CONQUER ON CUSTOM LENGTHED FOURIER TRANSFORMS

Thomas Dettbarn, Frank Mayer, Fraunhofer IIS, Germany

10:20 - PAPER NO. 8.2-5

A CHANNEL ESTIMATION METHOD BASED ON PILOT AND EM ALGORITHM FOR OFDM SYSTEMS

yun chen, State Key Laboratory of ASIC & System at Fudan University, Shanghai, China, China

SESSION 8.3: New Camera Technology

Chairs: Takuya Ima-ide; Akiomi Kunisa

09:00 - PAPER NO. 8.3-1

PROFILE FACE DETECTION USING BLOCK DIFFERENCE FEATURE FOR AUTOMATIC IMAGE ANNOTATION

Yasunori Ishii, Kazuyuki Imagawa, Eiji Fukumiya, Katsuhiro Iwasa, Yasunobu Ogura, Matsushita Electric Industrial Co., Ltd., Japan

09:20 - PAPER NO. 8.3-2

IN-CAMERA PERSON RECOGNITION FOR CONSUMER IMAGES

Gabriel Costache, NUI, Galway, Ireland; Eran Steinberg, Fotonation Inc., United States

09:40 - PAPER NO. 8.3-3

SECURE IMAGES CAPTURED BY DIGITAL CAMERA

Lei Tian, Heng-Ming Tai, University of Tulsa, United States

10:00 - PAPER NO. 8.3-4

A METHOD FOR EXTRACTING REGION OF INTEREST BASED ON ATTRACTIVENESS AND STUDY FOR CE APPLICATIONS

Masayuki KIMURA, Masaki YAMAUCHI, AV Core Technology Development Center, Matsushita Electric Industrial Co., Ltd. Japan, Japan

10:20 - PAPER NO. 8.3-5

REAL-TIME FAT FILE SYSTEM FOR MOBILE MULTIMEDIA DEVICES

Sunwha Park, Seong-Yong OHM, Seoul Women's University, South Korea

SESSION 8.4: Media Processing & Display

Chairs: Michael Isnardi; Sharon Peng

09:00 - PAPER NO. 8.4-1

THE DIGITAL MEDIA APPLICATION ON A CELL SOFTWARE PLATFORM

Nobuhiro Kato, TOSHIBA Corporation, Japan

09:20 - PAPER NO. 8.4-2

A PIXEL LEVEL PARALLEL PROCESSING ARCHITECTURE FOR MULTI-STANDARD VIDEO CODEC

Takeshi Tanaka, Takeshi Furuta, Hideshi Nishida, Kohsuke Yoshioka, Tokuzo Kiyohara, Matsushita Electric Industrial Co., Ltd., Japan

09:40 - PAPER NO. 8.4-3

SYSTEM LEVEL PTS-BASED AV SYNCHRONIZATION STRATEGIES FOR PLAYBACK CHAINS SPANNING MULTIPLE PROCESSOR CORES

Puranjoy Bhattacharya, Philips Semiconductors, India

10:00 - PAPER NO. 8.4-4

TEMPORAL-CONTEXT-BASED VIDEO BROWSING INTERFACE FOR PVR-ENABLED HIGH-DEFINITION TELEVISION SYSTEMS

Sam Shipman, Ajay Divakaran, Mitsubishi Electric Research Laboratories, Inc., United States; Mark Flynn, Atul Batra, Mitsubishi Digital Electronics America, Inc., United States

10:20 - PAPER NO. 8.4-5

OPTIMIZED IMAGE FORMATTING AND DISPLAY USING ACTIVE FORMAT DESCRIPTION DATA (AFD)

Mark Eyer, Sony Electronics, United States

POSTER SESSION 9.1: Networking II

Chair: Bill Rose

PAPER NO. 9.1-1

SYMBOL OVERLAPPED MULTIWAVELET PACKETS BASED OFDM

Shuzheng Xu, Tsinghua University, China

PAPER NO. 9.1-2

A NOVEL MODULATOR FOR EQUALIZATION DIGITAL ON-CHANNEL REPEATER IN ATSC SYSTEM

Sung Ik Park, ETRI, South Korea

PAPER NO. 9.1-3

A NOVEL LOW SUPPLY VOLTAGE VCO FOR IEEE 802.11A WLAN

Chuan Yu Liu, Dept. of Electrical Engineering National Dong Hwa University, Taiwan

PAPER NO. 9.1-4

THROUGHPUT ENHANCEMENT FOR UPLOADING TCP FLOWS IN IEEE 802.11 WIRELESS LANS

Nakjung Choi, Jiho Ryu, Yongho Seok, Yanghee Choi, Taekyoung Kwon, Seoul National University, South Korea

PAPER NO. 9.1-5

MAXIMUM RATIO COMBINING FOR OFDM SYSTEMS WITH COCHANNEL INTERFERENCE

Bo-Seok Seo, Chungbuk National University, South Korea

PAPER NO. 9.1-6

NEW CHANNEL ESTIMATION SCHEME EXPLOITING RELIABLE DECISION FEEDBACK SYMBOLS FOR OFDM SYSTEMS

Jung-Hyun Park, Mi-Kyung Oh, Yong-Ho Cho, Dong-Jo Park, Dept. of EECS, KAIST, South Korea

PAPER NO. 9.1-7

AN IMPLEMENTATION OF BATTERY-AWARE WIRELESS SENSOR NETWORK USING ZIGBEE FOR MULTIMEDIA SERVICE

Heng-Chih Huang, Yueh-Min Huang, Dept. of Engineering Science, National Cheng Kung University, Taiwan; Jen-Wen Ding, Department of Information Management, National Kaohsiung University of Applied Sciences, Taiwan

PAPER NO. 9.1-8

A CMOS 2.4 GHZ DELAY-LOCKED LOOP BASED PROGRAMMABLE FREQUENCY MULTIPLIER

Tung-Hui Su, National Dong Hwa University, Taiwan

PAPER NO. 9.1-9

A NEW ADAPTIVE TECHNIQUE FOR TRANSMITTER PRE-EMPHASIS AND RECEIVER EQUALIZATION IN A HIGH-SPEED BACKPLANE ENVIRONMENT

Lakshmi Baskaran, Sedig Agili, Aldo Morales, Penn State Harrisburg, United States

PAPER NO. 9.1-10

A HIGHLY EFFICIENT BLIND CARRIER FREQUENCY OFFSET ESTIMATOR FOR WIRELESS OFDM SYSTEMS

Arafat Al-Dweik, Emirates Telecommunication Corporation, United Arab Emirates; Ridha Hamila, Tampere University of Technology, Finland

SESSION 9.2: DVB-H Techniques & Performance

Chairs: Uwe Kraus; Paul Snopko

11:00 - PAPER NO. 9.2-1

A FAST SYNCHRONIZATION TECHNIQUE FOR DVB-H SYSTEM USING IN-BAND PILOTS AND CYCLIC PREFIX

Xianbin Wang, Communications Research Centre Canada, Canada

11:20 - PAPER NO. 9.2-2

RESTORATION OF IP-DATAGRAMS IN THE DVB-H LINK-LAYER FOR TV ON MOBILE

Arie Koppelaar, Philips Semiconductors, Netherlands

11:40 - PAPER NO. 9.2-3

IP-RECOVERY IN THE DVB-H LINK LAYER FOR TV ON MOBILE

Onno Eerenberg, Philips Research, Netherlands; Arie Koppelaar, Armand Stuivenwold, Philips Semiconductors, Netherlands; Peter

De With, LogicaCMG/Eindhoven University of Technology, Netherlands

12:00 - PAPER NO. 9.2-4**WIRELESS BROADBAND TERMINAL ACCESS VIA DVB-H – A PERFORMANCE EVALUATION**

Michael Kornfeld, Braunschweig Technical University, Institute for Communications Technology, Germany

POSTER SESSION 9.3: Image/Video Processing II

Chairs: Aldo Morales; Martin Bolton

PAPER NO. 9.3-1**TWO-STAGE FALSE CONTOUR DETECTION ALGORITHM USING RE-QUANTIZATION AND DIRECTIONAL CONTRAST FEATURES AND ITS APPLICATION TO ADAPTIVE FALSE CONTOUR REDUCTION**

Ji-won Lee, Bo-Ra Lim, Rae-Hong Park, sogang Univ., South Korea

PAPER NO. 9.3-2**EFFICIENT FACE TRANSMISSION SYSTEM FOR MPEG-4 MOBILE VIDEOPHONE VIA THE WIRELESS INTERNET**

JongBae Kim, University of Ulsan, South Korea

PAPER NO. 9.3-3**H.263+ REGION-OF-INTEREST VIDEO CODING WITH EFFICIENT SKIN-COLOR EXTRACTION**

Ming-Chieh Chi, Jyong-An Jhu, Mei-Juan Chen, Ching-Ting Hsu, Department of Electrical Engineering, National Dong-Hwa University, Taiwan

PAPER NO. 9.3-4**ROBUST TEMPORAL ERROR CONCEALMENT FOR H.264 VIDEO DECODER**

Wen-Wei Liao, Mei-Juan Chen, Ching-Ting Hsu, Department of Electrical Engineering, National Dong-Hwa University, Taiwan

PAPER NO. 9.3-5**A LOW COST ALGORITHM FOR CFA DATA COMPRESSION**

Antonio Buemi, Arcangelo Bruna, STMicroelectronics, Italy; Filippo Vella, STMicroelectronics, Italy; Andrea Vitali, STMicroelectronics, Italy

PAPER NO. 9.3-6**NOISE REDUCTION OF IMAGE SEQUENCES USING H.264/AVC VARIABLE BLOCK-SIZE MOTION COMPENSATION**

Rae-Hong Park, Sogang university, South Korea

PAPER NO. 9.3-7**BANDWIDTH-EFFICIENT INFORMATION-PROVIDING SYSTEM FOR MOBILE PHONE USERS**

Shin'ichi Shiraishi, Hokkaido University, Japan

PAPER NO. 9.3-8**A LOW-COMPLEXITY FEC ASSIGNMENT SCHEME FOR MOTION JPEG2000 OVER WIRELESS NETWORK**

Zhaohui Guo, Yuuki Nishikawa, Osaka University, Japan; Roberto Yusi Omaki, Synthesis Corporation, Japan; Takao Onoye, Osaka University, Japan; Isao Shirakawa, University of Hyogo, Japan

PAPER NO. 9.3-9**AN ADAPTIVE BLOCK MOTION ESTIMATION ALGORITHM BASED ON SPATIO TEMPORAL CORRELATION**

Humaira Nisar, Tae-Sun Choi, GIST, South Korea

PAPER NO. 9.3-10**LOW POWER PROGRAMMABLE SHADER WITH EFFICIENT GRAPHICS AND VIDEO ACCELERATION CAPABILITIES FOR MOBILE MULTIMEDIA APPLICATIONS**

You-Ming Tsao, Shao-Yi Chien, Chin-Hsiang Chang, Chung-Jr Lian, Liang-Gee Chen, National Taiwan University, Taiwan

PAPER NO. 9.3-11**IMPLEMENTATION OF A DAB RECEIVER WITH FPGA TECHNOLOGY**

Helena Sarmento, Horácio Neto, IST/INESC-ID, Portugal; Rúben Cabral, IST/Inesc-ID, Portugal; Samuel Escarigo, IST/INESC-ID, Portugal

PAPER NO. 9.3-12**A METHOD OF ACCURATE DTV TRANSPORT STREAMS SPLICING**

Li Wang, Tianjin University, China

PAPER NO. 9.3-13

HETEROGENEOUS MULTI-PROCESSOR FOR HIGH DEFINITION VIDEO

Aleksandar Beric, University of Technology Eindhoven, Netherlands; Ramanathan Sethuraman, Carlos Alba Pinto, Harm Peters, Gerard Veldman, Peter van de Haar, Marc Duranton, Philips Research, Netherlands

PAPER NO. 9.3-14

DUAL-CHANNEL VIDEO GRAPHICS CONTROLLER FOR HDTV FLAT-PANEL DISPLAY TV

Schu Markus, Wendel Dirk, Hahn Marko, Niedermeier Ulrich, Langenkamp Ulrich, Micronas GmbH, Germany

PAPER NO. 9.3-15

MEANINGFUL SCENE FILTERING FOR TV TERMINALS

Sung Ho Jin, Jun Ho Cho, Yong Man Ro, Information and Communications University, South Korea; Jin Woo Hong, Electronics and Telecommunications Research Institute, South Korea

SESSION 9.4: Video Transcoding

Chairs: Sharon Peng; Anthony Vetro

11:00 - PAPER NO. 9.4-1

PERFORMANCE EVALUATION OF TRANSCODING ALGORITHMS FOR H.264

Damien LEFOL, Bristol University, United Kingdom

11:20 - PAPER NO. 9.4-2

MPEG-2 TO H.264/AVC TRANSCODING FOR EFFICIENT STORAGE OF BROADCAST VIDEO BITSTREAMS

Jun Xin, Anthony Vetro, Mitsubishi Electric Research Labs, United States; Shun-ichi Sekiguchi, Kazuo Sugimoto, Mitsubishi Electric Corporation, Japan

11:40 - PAPER NO. 9.4-3

DCT DOMAIN INTRA MB MODE DECISION FOR MPEG-2 TO MPEG-4 TRANSCODING

Branko Petljanski, hari kalva, Florida Atlantic University, United States

12:00 - PAPER NO. 9.4-4

R-D OPTIMIZED FRAME-SKIPPING TRANSCODER FOR LOW BIT RATE VIDEO TRANSMISSION

Jae-Won Kim, Kwang-Il Ji, Goo-Rak Kwon, Korea University, South Korea; June-Sok Lee, Samsung Electronics, South Korea; Sung-Jea Ko, Korea University, South Korea

Wednesday PM

SESSION 10.1: Automotive TV Technology

Chair: Peter de With; Uwe E. Kraus

2:10 - PAPER NO. 10.1-1

HIGH-SENSITIVITY AND HIGH-MOBILITY COMPACT DVB-T RECEIVER FOR IN-CAR ENTERTAINMENT

Chua-Chin Wang, Hoi Kam Lo, Shih-Ping Lin, Ron Hu, Asuka Semiconductor Inc., Taiwan

2:30 - PAPER NO. 10.1-2

A ROADSCAPE ANALYSIS SYSTEM OF VEHICLE MOUNTED CAMERA-IMAGE

Ryujiro Fujita, Pioneer Corporation, Japan

2:50 - PAPER NO. 10.1-3

ANALYSIS OF LISTENER'S FAVORITE MUSIC BY MUSIC FEATURES

Katsunori Arakawa, Pioneer Corporation, Japan

3:10 - PAPER NO. 10.1-4

AN ADVANCED RECEIVER ARCHITECTURE FOR GLOBAL TERRESTRIAL TV RECEPTION FOR AUTOMOTIVE APPLICATIONS

Wolfgang Weltersbach, Philips Semiconductors, Germany

SESSION 10.2: ATSC Reception Techniques

Chair: Paul Snopko

2:10 - PAPER NO. 10.2-1

CARRIER PHASE INDEPENDENT TIMING RECOVERY METHODS FOR VSB RECEIVERS

Joon Tae Kim Professor, Konkuk University, South Korea

2:30 - PAPER NO. 10.2-2

A NEW ENHANCED CODING SCHEME FOR ROBUST BIT-STREAM OF ATSC DTV

Jaebum Kim, Namshik Kim, Hyuncheol Park, Information and Communications University(ICU), South Korea; Kumran Ji, Seungwon Kim, Electronics and Telecommunications Research Institute, South Korea

2:50 - PAPER NO. 10.2-3

A REPORT ON FIELD TEST RESULTS OF ENHANCED VSB SYSTEM

Yong-Tae Lee, Seung-Won Kim, Soo In Lee, ETRI, South Korea; Jong Soo Seo, Yonsei University, South Korea

3:10 - PAPER NO. 10.2-4

OPTIMAL BEAMSELECTION ALGORITHM FOR RECEPTION PERFORMANCE IMPROVEMENT OF ATSC 8-VSB DTV

Juyeun Kim, ETRI, South Korea

SPECIAL SESSION 10.3: Reactive Media

Chair: Keith Baker

2:10 - PAPER NO. 10.3-1

JULES VERNE PROJECT: REALIZATION OF REACTIVE MEDIA USING MPEG4 ON MHP

Keith Baker, Philips Applied Technologies, Netherlands

2:30 - PAPER NO. 10.3-2

INTERACTIVITY, REACTIVITY AND PROGRAMMABILITY: ADVANCED MPEG-4 MULTIMEDIA APPLICATIONS

Titus Zaharia, Marius Preda, Françoise Prêteux, Institut National des Télécommunications, France

2:50 - PAPER NO. 10.3-3

IMPLEMENTATION OF RAMO-BASED MULTIMEDIA APPLICATIONS ON MPEG-4 PLATFORM

Simon RENAULT, Benjamin GÂTEAU, Damien MATHEVON, Yannick NAUDET, Centre de Recherche Public Henri Tudor, Luxembourg

3:10 - PAPER NO. 10.3-4

INTERACTIVE TV: COMBINING MHP WITH MPEG4

Rop Pulles, Philips Applied Technologies, Netherlands

SESSION 10.4: Multimedia Streaming

Chairs: Anthony Ojo; Michael Isnardi

2:10 - PAPER NO. 10.4-1

HIGH-DEFINITION VIDEO QOS OVER A WIRELESS 802.11 NETWORK IN AN INTEGRATED SYSTEM

Paul Westergaard, ViXS Systems Inc., Canada

2:30 - PAPER NO. 10.4-2

NETWORK AV STREAMING TRANSMISSION TECHNOLOGY

Shigeru Sawada, Yoshikazu Mihara, Yoshikazu Kita, Masashi Fujita, Norio Fujino, Ryouzuke Ootsuki, SANYO Electric Co., Ltd., Japan

2:50 - PAPER NO. 10.4-3

ADAPTIVE GROUP BASED INTRABLOCK REFRESH TECHNIQUE FOR MBMS SYSTEMS

sanigepalli praveenkumar, motorola, United States; hari kalva, borko furht, FAU, United States

3:10 - PAPER NO. 10.4-4

MOTION ADAPTIVE INTRA REFRESH FOR LOW-DELAY VIDEO CODING

Ralf M. Schreier, Albrecht Rothermel, University of Ulm, Germany

SESSION 11.1: Software & Mobile

Chairs: Hans Baumgartner; Stu Lipoff

3:40 - PAPER NO. 11.1-1**DELIVERING 3D ADVERTISING TO MOBILE PHONES**

Fadi Chehimi, Paul Coulton, Reuben Edwards, Lancaster University, United Kingdom

4:00 - PAPER NO. 11.1-2**DESIGN OF NOISE REDUCTION HEADPHONE**

Sen M. Kuo Kuo, Northern Illinois University, United States

4:20 - PAPER NO. 11.1-3**UTILISING RFID FOR MIXED REALITY MOBILE GAMES**

Omer Rashid, Paul Coulton, Lancaster University, United Kingdom

4:40 - PAPER NO. 11.1-4**868/915 MHZ ZIGBEE RECEIVER FOR PERSONAL MEDICAL ASSISTANCE**

Chua-Chin Wang, Jian-Ming Huang, Chih-Yi Chang, Dept. of Electrical Engineering, National Sun Yat-Sen University, Taiwan; Chih-Peng Li, Institute of Communication Engineering, National Sun Yat-Sen University, Taiwan

SESSION 11.2: Signal Processing for Multiple Antennas, DVB-T and DAPSK/DMT

Chair: Uwe Kraus

3:40 - PAPER NO. 11.2-1**A SOFTWARE-CONFIGURABLE ADAPTIVE ARRAY ANTENNA SYSTEM FOR ISBD-T RECEPTION**

Hirokazu Asato, Magna Design Net, Inc., Japan; Takanobu Tabata, Kojima Press Industry Co.,Ltd., Japan; Dang Hai Pham, University of the Ryukyus, Vietnam; Hiroyuki Mizutani, Kazuhiro Kamiyama, Magna Design Net, Inc., Japan; Satoshi Hori, Kojima Press Industry Co.,Ltd., Japan; Tomohisa Wada, University of the Ryukyus, Japan

4:00 - PAPER NO. 11.2-2**ADAPTIVE BEAM STEERING RECEPTION SYSTEM FOR ISDB-T BASED ON PRE-FFT DIVERSITY TECHNIQUE**

Katsushi Sanda, Tsutayuki Shibata, Nobuo Itoh, Kenji Ito, Noriyoshi Suzuki, Junji Imai, Toyota Central R&D Labs., Inc., Japan

4:20 - PAPER NO. 11.2-3**A ROBUST TWO-ANTENNA DIGITAL TV RECEIVER FOR PORTABLE HANDSETS WITH ULTRA-HIGH INTERFERENCE CANCELLATION**

Yoshitomo Kaneda, Hajime Toma, Michiru Hori, Sadanori Sakaguchi, Takayoshi Tomoyose, Kunio Morimoto, Shuji Murakami, Sho Tamaki, Magna Design Net, Inc., Japan

4:40 - PAPER NO. 11.2-4**SPEED-OPTIMIZED SOFT DECISION DEMODULATION OF MULTILEVEL DAPSK SIGNALS**

Eitel Ben, Institute of Telecommunications, University of Stuttgart, Germany

5:00 - PAPER NO. 11.2-5**PERFORMANCE EVALUATION OF AN ICI SELF-CANCELLATION CODED DIGITAL VIDEO BROADCASTING TRANSCEIVER**

Khaled Matarneh, Sameer Herlekar, Hsiao-Chun Wu, Louisiana State University, United States; Yiyang Wu, Xianbin Wang, Communications Research Centre, Canada

SPECIAL SESSION 11.3: Content Analysis

Chairs: Peter de With; Dirk Farin

3:40 - PAPER NO. 11.3-1**DISTRIBUTED AND ADAPTIVE MULTIMEDIA CONTENT ANALYSIS PROTOTYPING FRAMEWORK FOR CONSUMER ELECTRONICS**

Fons de Lange, Philips Research, Eindhoven, The Netherlands 2 TU Eindhoven, The Netherlands, Netherlands

4:00 - PAPER NO. 11.3-2**SMART SEARCH & RETRIEVAL ON VIDEO DATABASES**

A.H.R. Albers, R.G.J. Wijnhoven, Bosch Security Systems, Netherlands; E.G.T. Jaspers, LogicaCMG, Netherlands; P.H.N. de With, Eindhoven University of Technology, Netherlands

4:20 - PAPER NO. 11.3-3

AN AUTOMATIC ANALYZER FOR SPORTS VIDEO DATABASES USING VISUAL CUES AND REAL WORLD MODELING

Jungong Han, Technology university of Eindhoven, Netherlands

4:40 - PAPER NO. 11.3-4

AUTOMATIC VIDEO-OBJECT SEGMENTATION EMPLOYING MULTI-SPRITES WITH CONSTRAINED DELAY

Dirk Farin, Peter de With, Technical University Eindhoven, Netherlands

SESSION 11.4: Advanced Motion Estimation & Coding

Chairs: Michael Isnardi; Phillip Dang

3:40 - PAPER NO. 11.4-1

DYNAMIC CONTROL OF MOTION ESTIMATION SEARCH PARAMETERS FOR LOW COMPLEX H.264/AVC VIDEO CODING

Sergio Saponara, University of Pisa, Italy; Fabrizio Rovati, Daniele Alfonso, STMicroelectronics, Italy; Michele Casula, Luca Fanucci, University of Pisa, Italy

4:00 - PAPER NO. 11.4-2

BIT RATE DISTRIBUTION ANALYSIS FOR MOTION ESTIMATION IN H.264

Jun Zhang, Xiaoquan Yi, Nam Ling, Weijia Shang, Santa Clara University, United States

4:20 - PAPER NO. 11.4-3

IMPROVED UPDATE STEPS THROUGH MOTION VECTOR CORRELATION ANALYSIS FOR SCALABLE VIDEO CODING

Fengling Li, Nam Ling, Santa Clara University, United States

4:40 - PAPER NO. 11.4-4

EFFICIENT SVC ENCODING SCHEME FOR THE VIDEO TRANSMISSION OVER VARIOUS NETWORKS

Sang-Hee Park, Hyo-Kak Kim, Jong-Won Jung, Sung-Jea Ko, Korea University, South Korea