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Apt.F5, Pittsburgh, PA 15213-1665 (US). THOMPSON, Richard, A. [US/US]; 403 Hickory Court, Pittsburgh, PA 15238 (US).

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(74) Agent: HOUSER, Kirk, D.; Eckert Seamans Cherin & Mellott, LLC, 600 Grant St., 44th Floor, Pittsburgh, PA 15219 (US).

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(71) Applicant (for all designated States except US): UNIVERSITY OF PITTSBURGH OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION [US/US]; 200 Gardner Steel Conference Center, O'Hara & Thackeray Streets, Pittsburgh, PA 15260 (US).

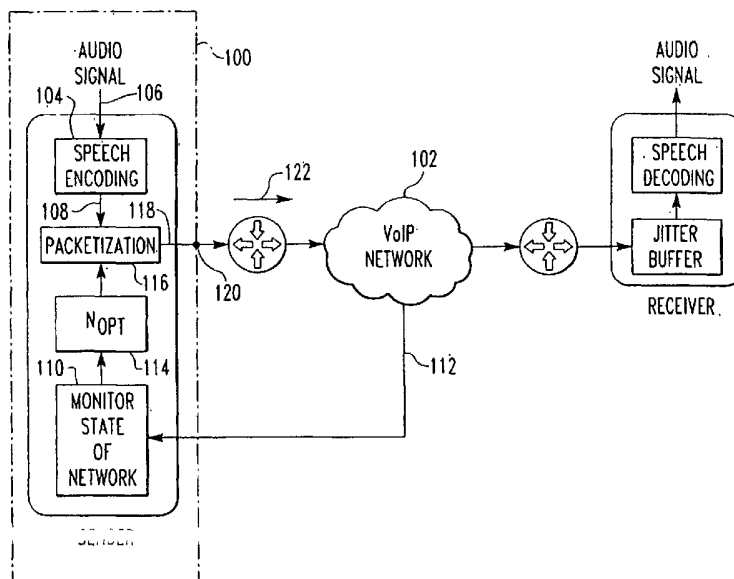
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(72) Inventors; and

(75) Inventors/Applicants (for US only): NGAMWONG-WATTANA, Boonchai [TH/US]; 240 Melwood Avenue,

[Continued on next page]

(54) Title: OPTIMIZING PACKETIZATION FOR MINIMAL END-TO-END DELAY IN VOIP NETWORKS



(57) Abstract: A method of optimizing packetization for a sending device (100) for a Voice over Internet Protocol network (102) includes encoding an audio signal, and monitoring a state of the Voice over Internet Protocol network. An optimal count of compressed data frames is determined from the state of the Voice over Internet Protocol network. The optimal count is employed to packetize the encoded audio signal in a payload. The payload is sent in a voice packet to the Voice over Internet Protocol network.

WO 2005/043178 A3



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,*

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International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01R 31/08; G06F 11/00; G08C 15/00; H04J 1/16, 3/00, 3/06, 3/14, 3/16, 3/22; H04L 1/00 12/26
 US CL : 370/252, 465, 476, 516

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 370/241, 252, 465, 476, 516

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,421,720 B2 (FITZGERALD) 16 July 2002 (16.07.2002), figs. 2-6	1-14 and 17-20
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Y		15-16
Y	US 6,370,163 B1 (SHAFFER et al) 09 April 2002 (09.04.2002), col. 4, lines 15-18.	15-16

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"T"
"A" document defining the general state of the art which is not considered to be of particular relevance	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"B" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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 Authorized officer: Kevin C. Harper, Telephone No. 571-272-0000. *R. Regina Zagan*

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/37984

Continuation of B. FIELDS SEARCHED Item 3:
EAST
search terms: VOIP, network delay, packet length, payload length