Europäisches Patentamt
European Patent Office
Office européen des brevets

European Patent Office
80298 MUNICH
GERMANY

Questions about this communication ?
Contact Customer Services at www.epo.org/contact

Johnson, Lucy Elizabeth
Murgitroyd & Company
Scotland House
165-169 Scotland Street
Glasgow G5 8PL
ROYAUME UNI

Date
10.02.16

Reference	Application No./Patent No.
G162106.00.01	06840473.0 - 1853 / 1961154 PCT/CA2006002046
Applicant/Proprietor	
Audio Pod Inc.	

Communication

The extended European search report is enclosed.

The extended European search report includes, pursuant to Rule 62 EPC, the supplementary European search report (Art. 153(7) EPC) and the European search opinion.

Copies of documents cited in the European search report are attached.

☑ 1 additional set(s) of copies of such documents is (are) enclosed as well.

Refund of the search fee
If applicable under Article 9 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.

Should you wish to further prosecute this application in the examination phase, your attention is drawn to the provisions of Rule 70a EPC. An invitation to respond to the extended European search report will be issued shortly (R. 70(2) EPC).

Europäisches Patentamt • European Patent Office • Office européen des brevets

The examination is being carried out on the **following application documents**

Description, Pages

1-24 as published

Description, Paragraphs

46, 52, 69 filed in electronic form on 11-05-2008

Claims, Numbers

1-15 filed in electronic form on 11-05-2008

Drawings, Sheets

1/15-15/15 as published

1 The application lacks unity within the meaning of Article 82 EPC.

The following separate potential inventions or groups of potential inventions are not so linked as to form a single general inventive concept (Article 82 and rule 44 EPC):

claims: 1-5

Methods for processing an audio stream into segments that are maintained in a plurality of small digital audio files

claims: 6-11, 13-15

Methods for creating and supporting handling of bookmarks in digital audio data transmission

claim: 12

Method for optimal server selection for digital audio data transmission

The reasons for which the potential inventions are not so linked as far as to form a single general inventive concept are the following:

The claimed inventions do not relate to a single inventive concept because they lack the same or corresponding special technical features for the following reason:

The subject-matter of the first claimed invention (represented by claim 1) operates to ensure that a an audio stream gets segmented into a plurality of small digital audio files.

The subject-matter of the second claimed invention (represented by claim 6) operates to provide bookmark handling in digital audio transmission.

The subject-matter of the third claimed invention (represented by claim 12) operates to provide selection of the best possible server for digital audio transmission.

Therefore the three groups of inventions are not so linked by common or corresponding technical features and define three different inventions not linked by a single general inventive concept. Thus the requirements of Article 82 EPC are not met.

2 As the applicant has not had a search report drawn up on the other claimed inventions (Rule 64 EPC), the application will be prosecuted on the basis of the invention in respect of which a search has already been carried out, in other words the invention first mentioned in the claims. The applicant should therefore limit the application to the invention searched and excise those parts of the application relating to the other invention.

The subject-matter to be excised may be made the subject of one or more divisional applications according to Rule 36 EPC.

With respect to the first claimed invention:

3 The following documents have been cited in the search report; the numbering will be adhered to in the rest of the procedure:

D1 US 2005/245243 A1 (ZUNIGA MICHAEL A [US]) 3 November 2005 (2005-11-03)

D2 WO 01/58165 A2 (STREAMINGTEXT INC [US]; ANGELL PHILIP S [US]; HAQUE MOHAMMAD A [US]; L) 9 August 2001 (2001-08-09)

D3 DELACOURT P ET AL: "DISTBIC: A speaker-based segmentation for audio data indexing",
SPEECH COMMUNICATION, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL,
vol. 32, no. 1-2, 1 September 2000 (2000-09-01), pages 111-126, XP004216249,
ISSN: 0167-6393, DOI: 10.1016/S0167-6393(00)00027-3

4 The vague and imprecise statement in the description on page 24, paragraph 89 implies that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in a lack of clarity of the claims (Article 84 EPC) when the description is used to interpret the claims (see Guidelines F-IV, 4.4). This statement should therefore be amended to remove this inconsistency.

5 The present application does not meet the requirements of Article 52(1) EPC because the subject-matter of independent claims 1 and 4 does not involve an inventive step within the meaning of Article 56 EPC.

5.1 Claim 1: Document D1 discloses:

A method of providing files for storage in a network accessible library for use in transmission of digital audio data (D1, Figure 2), the method comprising the steps of:
a) segmenting an audio stream into a plurality of small digital audio files (D1, Figure 2, reference 205, "Decompose into sequence of small audio files"; paragraph 45) ~~using natural language gaps in the audio stream~~;
b) determining at least one of a start time, an end time, and a play time of

each small digital audio file within the audio stream (D1, paragraph 21); and c) creating a descriptor for identifying the audio stream and for ordering the plurality of small digital audio files, the descriptor including the at least one of a start time, an end time, and a play time of each small digital audio file within the audio stream (D1, paragraphs 21 and 55), and including at least one of a title, subtitle, author, theme, plot, performer, publisher, copyright holder, ISBN number, and 'Vchip' rating of the audio stream (D1, paragraphs 48-51).

Alternatively to document D1, document D2 can be used in the reasoning the relevant passages are indicated in the search report.

The difference between document D1 (or alternatively document D2) and the subject-matter of claim 1 is that the segmentation of the audio stream is done using natural language gaps in the audio stream. D1 is completely silent about the segmentation and D2 discloses on page 20, lines 4-16 time based segmentation.

The problem to be solved may therefore be regarded as how to perform segmentation of the audio stream into small files.

The solution proposed in claim 1 of the present application cannot be considered to involve an inventive step (Articles 52(1) and 56 EPC):

The feature of using natural language gaps for segmenting an audio stream is merely one of several alternative straightforward possibilities which the skilled person would select, depending on the circumstances, without exercising inventive skill, in order to solve the problem posed. Segmentation of an audio stream using natural language characteristics is considered notoriously well-known in the art and constitutes of techniques that are straightforward applicable in any system that has to somehow segment an audio-stream. Segmentation of an audio stream into segments using natural language gaps if for example described in document D3. D3 performs the segmentation for the purpose of indexing, which is also occurring in the current application. D3 discloses in paragraph 4.1 the use of silence detection to determine the segmentation which corresponds with natural language gap detection. In addition, it is to be noted that document D2 on page 45, lines 5-10 discloses

using a digital signal processor to help split voices apart, which might not be exactly the same, but at least hint at natural language processing of the data stream for splitting up.

5.2 The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent claim 4 which therefore is also considered not inventive. It is to be noted that claim 4 is related to the transmission of the digital audio, where claim 1 is related to the provisioning of files for storage. However document D1 discloses unambiguously the purpose of delivery of the processed audio content to end-users.

6 As far as not covered by the reasoning for claim 1 (e.g. claim 5), dependent claims 2-3, 5 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the EPC with respect to inventive step:

6.1 The additional subject-matter of claim 2 is disclosed in D3, paragraph 4.1 on page 114, column 2, "if the power value is below a given threshold, then the signal is identified as silence".

6.2 The additional subject-matter of claim 3 is at least hinted at by the role of the editorial agent as disclosed in D3, page 12, lines 9-14.

With respect to the second claimed invention (claims 6-11,13-15):

7 The following documents have been cited in the search report; the numbering will be adhered to in the rest of the procedure:

D4 EP 1 463 258 A1 (MOBILE INTEGRATED SOLUTIONS LT [IE]) 29 September 2004 (2004-09-29)

D5 WO 02/08948 A2 (VIVCOM INC [US]; SULL SANGHOON [KR]; KIM HYEOKMAN [KR]; CHOI HYUNGSEOK) 31 January 2002 (2002-01-31)

D6 WO 02/080524 A2 (KONINKL PHILIPS ELECTRONICS NV [NL]) 10 October 2002 (2002-10-10)

8 The present application does not meet the requirements of Article 52(1) EPC because the subject-matter of independent claim 13 is not new within the meaning of Article 54(1) and (2) EPC.

8.1 Claim 13: Document D4 discloses:

A method for creating a bookmark for use in transmission of digital audio data, comprising the steps of:
a) listening to an audio stream (D4, paragraph 1 "audio in the form of books"; paragraph (D4, paragraph 22, "audio book transmission may be either a selective download of an audio file of a chapter of a selected book, or a transmission using streaming technology");
b) determining a current position within the audio stream (D4, paragraphs 35 and 36);
c) determining a time offset from a start of the audio stream to the current position (D4, paragraphs 35 and 36); and,
d) creating a bookmark for the current position including the time offset (D4, paragraphs 35 and 36).

9 The present application does not meet the requirements of Article 52(1) EPC because the subject-matter of claim 15 does not involve an inventive step within the meaning of Article 56 EPC.

9.1 Claim 15: Document D4 discloses:

A computer readable storage medium including computer readable code, which when executed by a computer (D4, paragraphs 4, 16, "using a computer for playback"), causes said computer to:
download at least part of a selected audio stream stored on a network accessible server (D4, paragraph 22, "audio book transmission may be either a selective download of an audio file of a chapter of a selected book"), the selected audio stream stored as a plurality of small digital audio files, each small digital audio file corresponding to a segment of the selected audio stream (D4, paragraph 10) ~~bounded by natural language gaps in the selected audio stream~~; and
begin playing the downloaded audio stream using a media player without significant delay (D4, paragraph 33, "the received data being played as it is received, with as short delay as possible between reception and playing.") and such that the transition between successive small digital audio files appears seamless to a user of the media player,
wherein play is begun from a predetermined position within the selected audio stream, the predetermined position determined using a time offset in the selected audio stream, the time offset obtained from one of a bookmark, a catalog index, and an advertising structure (D4, paragraph 22, "The user is not restricted to chapters. He/she can randomly bookmark and then resume from that bookmarked location, but charging is restricted to the whole book, index, chapter or any other logical cohesion totally separate from bookmarking.").

The subject-matter of claim 1 therefore differs from this known prior art disclosure in that the segmentation of the audio stream occurs bounded by natural language gaps in the selected audio.

The problem to be solved may therefore be regarded as how to perform segmentation of the audio stream into small files.

The solution proposed in claim 15 of the present application cannot be considered to involve an inventive step (Articles 52(1) and 56 EPC), the reasons being similar to the reasoning presented for claim 1. In addition D5 discloses boundaries based on chapter which appear to also correspond to natural language gaps.

10 As far as not yet covered by the reasoning made for claim 13 (e.g. claims 9, 14), dependent claims 6-11, 14 does not appear to contain any additional features which, in combination with the features of any claim to which it refers, meet the requirements of the EPC with respect to novelty and/or inventive step:

The additional subject-matter of claim 6 is disclosed in document D4, paragraph 35. The additional subject-matter of claims 7-8 is disclosed in D4, paragraphs 35 and 36. The additional subject-matter of claim 10 is implicitly disclosed in D4, paragraphs 7 and 17. There it is clearly indicated that support for devices with limited storage space has to be foreseen and that data is transmitted as required for the device. As such the skilled person is at least hinted at intelligent memory management on a client device which is not an uncommon technique to be applied in portable devices. As far as considered clear, the subject-matter of claim 11 is disclosed in document D4, paragraph 17.

11 It is not at present apparent which part of the application could serve as a basis for a new, allowable claim.

12 Should the applicant nevertheless regard some particular matter as patentable, an independent claim should be filed taking account of Rule 43(1) EPC. The applicant should also indicate in the letter of reply the difference of the subject-matter of the new claim vis-à-vis the state of the art and the strong supporting arguments detailing its inventive contribution to the art, **based on the technical features of the independent claims**, preferably making use of the problem and solution approach as in Guidelines G-VII, 7.

13 To meet the requirements of Rule 42(1)(b) EPC, documents D1, D2 and D4 should be identified in the description and the relevant background art disclosed therein should be briefly discussed.

14 When filing amended claims the applicant should at the same time bring the description into conformity with the amended claims (Rule 42(1)(c) EPC). Care should be taken during revision, especially of the introductory portion and any statements of problem or advantage, not to add subject-matter which extends beyond the content of the application as originally filed (Article 123(2) EPC).

15 The attention of the applicant is drawn to the fact that the application may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed (Article 123(2) EPC).

In order facilitate the examination of the conformity of the amended application with the requirements of Article 123(2) EPC and to comply with the requirements of Rule 137(4) EPC, the applicant **must** (Guidelines, H-III, 2.1) clearly identify the amendments made, irrespective of whether they concern amendments by addition, replacement or deletion, and indicate the passages of the application as filed on which these amendments are based (see Guidelines H-III, 2.2).

Information on Search Strategy - Pilot phase (see OJ 2015, A86)
The type of information contained in this sheet may change during the pilot for improving the usefulness of this new service.

Application Number
EP 06 84 0473

TITLE: SEGMENTATION AND TRANSMISSION OF AUDIO STREAMS

APPLICANT: Audio Pod Inc.

IPC CLASSIFICATION: H04L12/16, G10L15/08, G10L21/00, H04L29/06, G10L25/78

EXAMINER: Mannekens, Jan

CONSULTED DATABASES: WPI, COMPDX, EPODOC, INET, NPL, TXTE, XPESP, XPI3E, XPIPCOM, XPMISC

CLASSIFICATION SYMBOLS DEFINING EXTENT OF THE SEARCH:

IPC:

CPC: H04L65/4084, H04L65/607, H04L65/602, G10L15/05, G10L15/18

FI/F-TERMS:

KEYWORDS OR OTHER ELEMENTS FEATURING THE INVENTION:

EPO FORM P04A42

Europäisches Patentamt
European Patent Office
Office européen des brevets

SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application Number
EP 06 84 0473

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2005/245243 A1 (ZUNIGA MICHAEL A [US]) 3 November 2005 (2005-11-03) * paragraphs [0015] - [0017], [0019] - [0021], [0045], [0054] - [0055]; figure 2 *	1-5	INV. H04L12/16 G10L15/08 G10L21/00 H04L29/06 G10L25/78
X	WO 01/58165 A2 (STREAMINGTEXT INC [US]; ANGELL PHILIP S [US]; HAQUE MOHAMMAD A [US]; L) 9 August 2001 (2001-08-09) * page 20, line 5 - line 14 * * page 45, line 5 - line 8 * * figures 1,5B,8 *	1-5	
A	DELACOURT P ET AL: "DISTBIC: A speaker-based segmentation for audio data indexing", SPEECH COMMUNICATION, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 32, no. 1-2, 1 September 2000 (2000-09-01), pages 111-126, XP004216249, ISSN: 0167-6393, DOI: 10.1016/S0167-6393(00)00027-3 * paragraph [04.1] *	1-5	TECHNICAL FIELDS SEARCHED (IPC) H04L G10L
X	EP 1 463 258 A1 (MOBILE INTEGRATED SOLUTIONS LT [IE]) 29 September 2004 (2004-09-29) * paragraphs [0005] - [0007], [0010], [0022], [0035] - [0036]; claim 12 *	6-11, 13-15	
A	WO 02/08948 A2 (VIVCOM INC [US]; SULL SANGHOON [KR]; KIM HYEOKMAN [KR]; CHOI HYUNGSEOK) 31 January 2002 (2002-01-31) * the whole document *	6-11, 13-15	

-/--

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search	Date of completion of the search	Examiner
The Hague	3 February 2016	Mannekens, Jan

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C04)

Europäisches Patentamt
European Patent Office
Office européen des brevets

SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application Number
EP 06 84 0473

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	WO 02/080524 A2 (KONINKL PHILIPS ELECTRONICS NV [NL]) 10 October 2002 (2002-10-10) * page 3, line 18 - line 24 * -----	6-11, 13-15	
			TECHNICAL FIELDS SEARCHED (IPC)

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search	Date of completion of the search	Examiner
The Hague	3 February 2016	Mannekens, Jan

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

2

EPO FORM 1503 03.82 (P04C04)

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☒ Only part of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
1-11, 13-15

☐ None of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims:

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-5

   Methods for processing an audio stream into segments that are maintained in a plurality of small digital audio files

   ---

2. claims: 6-11, 13-15

   Methods for creating and supporting handling of bookmarks in digital audio streaming

   ---

3. claim: 12

   Method for optimal server selection for digital audio streaming

   ---

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 06 84 0473

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-02-2016

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005245243 A1	03-11-2005	NONE	
WO 0158165 A2	09-08-2001	AU 3326901 A	14-08-2001
		WO 0158165 A2	09-08-2001
EP 1463258 A1	29-09-2004	NONE	
WO 0208948 A2	31-01-2002	AU 8300401 A	05-02-2002
		KR 20050002681 A	10-01-2005
		KR 20070103728 A	24-10-2007
		US 2002069218 A1	06-06-2002
		US 2007033170 A1	08-02-2007
		US 2007033292 A1	08-02-2007
		US 2007033515 A1	08-02-2007
		US 2007033521 A1	08-02-2007
		US 2007033533 A1	08-02-2007
		US 2007038612 A1	15-02-2007
		US 2007044010 A1	22-02-2007
		US 2011093492 A1	21-04-2011
		WO 0208948 A2	31-01-2002
WO 02080524 A2	10-10-2002	CN 1520561 A	11-08-2004
		EP 1421780 A2	26-05-2004
		JP 2004526372 A	26-08-2004
		KR 20030007736 A	23-01-2003
		US 2002163532 A1	07-11-2002
		WO 02080524 A2	10-10-2002

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82