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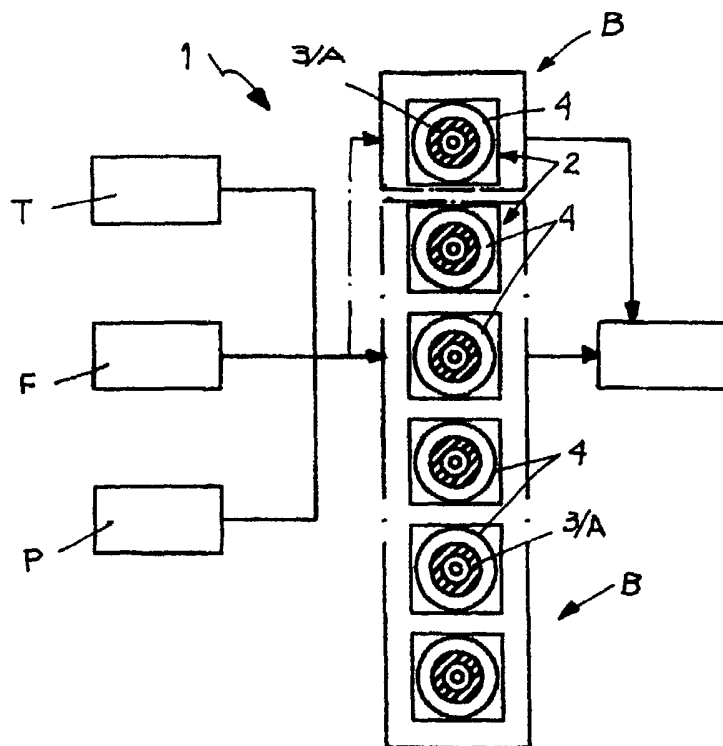
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(54) Title: RECORDING CONFIGURATION OF A DIGITAL INFORMATION CARRIER (SOUND AND IMAGE) FOR AVOID NON AUTHORIZED COPIES



(57) Abstract: A recording configuration (1) related to image/sound digital information (2) recorded in optic discs (4) such as CD and DVD and the like and being able to be read in any reader equipment (1), comprising an optic disc (4) in which a recorded track portion (3) corresponds to a track portion (A) to be recorded from a set of whole tracks comprising the whole content (B); the track portion (A) recorded in the track (3) has a customer final cost corresponding to the total cost of the whole content (B). The configuration has been specially provided for reduce sound/image recording costs related to optic discs, for reach a low customer final cost and eliminating problems caused by illegal copies or not authorized copies.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

**RECORDING CONFIGURATION OF A DIGITAL INFORMATION CARRIER
(SOUND AND IMAGE) FOR AVOID NON AUTHORIZED COPIES**

FIELD OF THE INVENTION

The present invention refers to a recording configuration of a digital
5 information carrier (sound and image) for avoid unauthorized copies,
particularly, the present invention refers to a special configuration for reduce
to cost of a sound/image recording in optic discs and provide a final cost very
reduced; the low cost of such optic disc will also reduce the piracy and the
unauthorized copies.

10 BACKGROUND OF THE INVENTION

It is know in the art that unauthorized copies is problem which is
increasing year by year. Professionals in the art, like Optic Disc Producers,
commonly draw the public attention to the iamge/sound piracy acting the
music, films, games.

15 The last report of the IFPI (International Federation of the Phonographic
Industry) informs that piracy has up to 50% (or more) of the music disc market
in 25 Countries in four Continents, Brazil is included.

Such report raises an appeal to National Governments for make efforts
against piracy, because CD piracy is bad to local cultures, stimulates criminal
20 organizations e enhances the unemployment.

Recently, a Federal Law has been issued for obligate CD, cassette
copies and the like to have digital signals in the corresponding serial number
in order to be legally marketed in Brazil. Such Law has been put in force in
April 22, 2003 and makes easy fiscalization operations, and turns piracy more
25 difficult.

Moreover, the digital signals and the serial number of CD batches are
complemented by a set of criteria which are stated just for make fiscalization
operations more efficient.

Another measure which has been taken in the art comprised the insertion of a digital code for permit the identification of the legal phonogram and the respective authors or authorized artists, permanently and in real time.

Therefore, the search in the state of the art has indicated some patent documents related to this matter and the solutions provided in the prior art, for example, the Brazilian document PI0112805 referring to a method for protect against optic disc copies by employing the different capability profiles of the encoder associated to a laser beam recorder and the CD writers of the art. The copy disc from the CD writer will provide a CD reader with a corrupted file and/or error message.

Another document, the Brazilian document PI 0104458, refers to a protection against copies of digital Compact Discs (CD) based on the fact of the user can employ a CD-ROM unity for read a sound data from a disc and save such data in a computer file and after, such data can be copied. Therefore, errors are intentionally provoked in the CD, such errors are not detected in a sound equipment, but it will cause interferences when the sound data is to be extracted from the disc by a data reader.

Another Brazilian patent document, PI0016182 refers to a digital sound compact disc protected against copies and to a method for its production, such as neither the original track run nor the protection capability activation depends on a special kind of equipment. A noise patterns is incorporated to the CD content by means of a superimposed record of certain correction symbols and/or signals, so the final result is an incorrect code recording and other not correct values. A common CD recorder of such CD will detect a value of noise as a not reversible error and will apply a hiding error for avoid the error output.

Generally, as stated above, the phonographic industries and others aim to provide means in the optic discs for impeach unauthorized copies by damaging to the copy or blocking its recording.

However, in spite of all the above solutions, no suitable solution has been found, even most of the recording equipment reject the protected discs and it can cause damages to the optic reader.

Another problem, probably the big one, is that all these approachings
5 imply additional cost to the phonographic industry and the others, because expertise personnel is to be employed for provide novel solutions, novel recording equipment mechanisms, etc, which turn the final expensive. Such costs do not include Govern fees.

By other hand, the piracy products industry grows up freely because it
10 provides a low cost product, but without any technical quality which may cause the damage of the image/sound equipment.

Furthermore, illegal products are not charged by Official fees, do not pay copyrights, etc, they are not part of the production chain of the legal product, reaching quickly the market necessities, i.e., provide a similar
15 product with a very low final cost.

In the same chain, in the end, is placed the customer who, in most developing Countries (where the illegal market is more enhanced), aims products with a low cost (games, CD, ...) and stimulating unfair practices and closing the piracy circle.

20 **SUMMARY OF THE INVENTION**

In view of the above, the present invention particularly provide a solution to the artists class, the most interested part in this matter which comprises a novel configuration to the final product (ready to sell) with a cost which is low than the piracy product price, i.e., a solution to the more
25 complicate variable of this problem.

Based on statistics data from the phonographic industry, when an optic disc is issued, e.g. single singers, duets or bands, it contains about 12-15 songs and certainly, two or three of such songs are to be freely shown to the market (radio and TV programs) for promotion ends.

Accordingly, the fans buy the CD (or DVD) in view of the good impact of the freely shown songs.

Therefore, the present invention comprises a novel recording configuration containing digital information provided in modules, i.e., a CD or
5 DVD containing 12 songs is provided in order to match any configuration of an sound/image data reader equipment and containing two or three songs, preferably those songs to be freely shown.

So, the novel recording configuration permits a lower final cost when compared to the the current cost, and it provides a very competitive market
10 price in view of the piracy products, but with many advantageous features, because the technical quality of the legal copy and the reader equipment is thus preserved. Another feature is the customer warranty provided by legal products.

Other advantageous feature of the present invention is the maintenance
15 of the legal commerce network, i.e., all rights are legally preserved and the author has a means for control the production and sales, the phonographic industry is able to control and enhance its sale capability and the Government collects and controls the respective fees.

BRIEF DESCRIPTION OF THE DRAWINGS

20 With regard to the above description which is directed to the preferred embodiments, a set of drawings is provided wherein:

Fig. 1 illustrates a diagram in which a novel recording configuration is shown indicating all involved parts;

25 Fig. 2 illustrates a preferred embodiment of the novel recording configuration;

Fig. 3 illustrates certain way of storing the novel recording configuration.

BRIEF DESCRIPTION OF THE INVENTION

Referring to the drawings, the present invention refers to a
RECORDING CONFIGURATION OF A DIGITAL INFORMATION CARRIER
30 **(SOUND AND IMAGE) FOR AVOID NON AUTHORIZED COPIES**, a novel

configuration (1) of a set of digital information (2) related to image/sound are recorded in an optic disc (4) - CD and/or DVD or the like - which is able to be read in an sound/image equipment and involving a legal commerce network from the author (T), the phonographic industry (F) or the like, fees and taxes (P) and the customers (C), the configuration (1) is provided in a such manner that the optic disc (4) has a recorded track portion (3) corresponding to a part of track recording (A) from a total set of tracks comprising the whole disc content.

The track portion(3) containing part of the track (A) of the optic disc (4) and in accordance to the configuration (1), can be configured as a module (B) or it can be configured as the whole disc content if such content comprises a disc (4) having recorded tracks (A) of digital information (2).

Accordingly, the disc (4) having part of the tracks (A) recorded in the track portion (3) comprises a final cost which corresponds to a part of the total cost, and it permits a customer final cost significantly lower when it is compared to the current costs.

One of the advantages of the present invention, is that the customer can buy other optic discs (4) having different track arrangements (A) which can be made public or not, and the whole content can be completed step by step.

The CD or DVD permits a tracking configuration provided by several periferal configurations, from circular configuration to other, but being fitted to any reader equipment.

Envelopes (E) can be provided, but other kind of housing can define a receptacle to separatelly (or not) store the data, thus forming the whole content.

Further, the present invention comprises a recording configuration in which a set of digital information related to sound and or image in an optic disc (4) such as CD/CDR; DVD/DVDR discs or the like which are able to be read in any reader equipment and the optic disc (4) having a recorded track portion(3)

corresponding to at least one sound/image recorded track (A) from a whole content (B); the optic disc (4) having the following features:

- a) a technical disclosure (FT) of the optic disc(4) (sound/image) such as CD/CDR; DVD/DVDR, the technical report is printed (P) or recorded (G) in a track in addition to sound and image tracks; and
- b) the optic disc has a transparent look or is coated by metallized color films (MC).

The present invention has been described in terms of its preferred embodiments, but it do not intend to limit the scope of the instant invention; such terms and different embodiments to be applied are considered as in the scope defined in the appending claims.

CLAIMS:

1- RECORDING CONFIGURATION OF A DIGITAL INFORMATION CARRIER (SOUND AND IMAGE) FOR AVOID NON AUTHORIZED COPIES, a recording configuration (1) related to image/sound digital information (2) recorded in optic discs (4) such as CD and DVD and the like and being able to be read in any reader equipment (1), comprising an optic disc (4) in which a recorded track portion (3) corresponds to a track portion (A) to be recorded from a set of whole tracks comprising the whole content (B).; the track portion (A) recorded in the track (3) has a customer final cost corresponding to the total cost of the whole content (B).

2-Configuration, according to claim 1, wherein the recorded track portion (3) containing the track portion (A) of the optic disc (4) is defined as a module of the whole content (B).

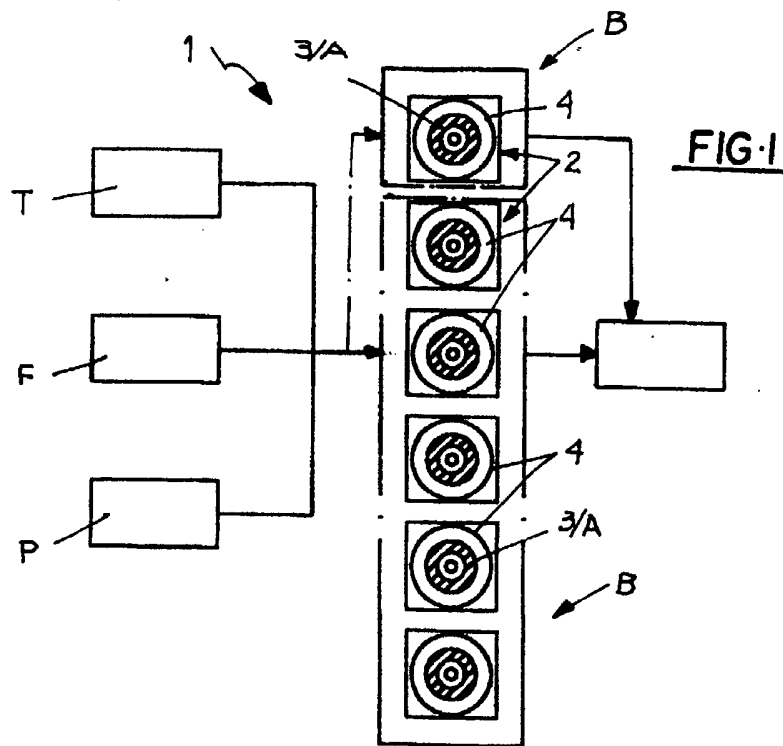
3-Configuration, according to claim 1, wherein the recorded track portion (3) containing the track portion (A) of the optic disc is defined as the whole content.

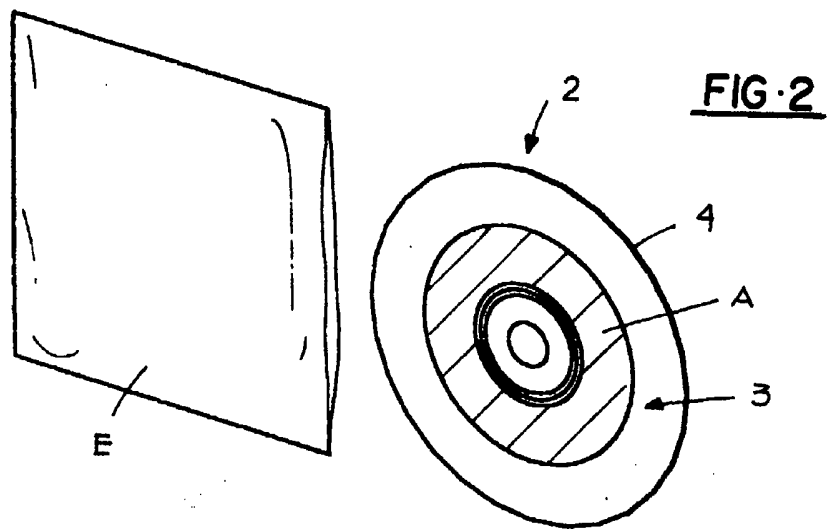
4-Configuration, according to any preceeding claims, wherein the disc (4) corresponding to the recording configuration (1) is provided in several periferal configurations in a such manner that they can be fitted to any reader sound/image equipment.

5-Configuration, according to any preceeding claims, wherein the disc (4) is housed in envelopes (E) or any other housing form comprising a receptacle to separately, or not, data storing and completing the whole content.

6-Configuration, according to claim 1, comprising a a set of digital information related to sound and or image in an optic disc (4) such as CD/CDR; DVD/DVDR discs or the like which are able to be read in any reader equipment and the optic disc (4) having a recorded track portion(3) corresponding to at least one sound/image recorded track (A) from a whole content (B); the optic disc (4) having the following features:

- c) a technical disclosure (FT) of the optic disc(4) (sound/image) such as CD/CDR; DVD/DVDR, the technical report is printed (P) or recorded (G) in a track in addition to sound and image tracks; and the optic disc has a transparent look or is coated by metallized color films (MC).
- 5





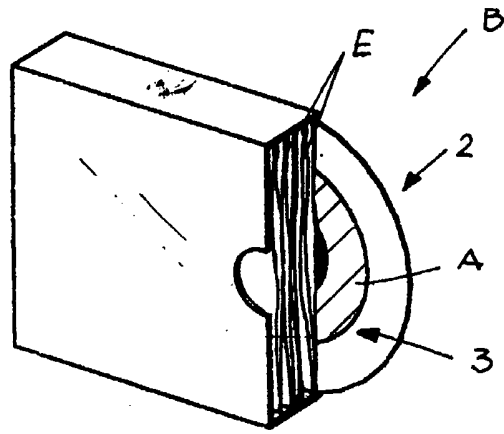
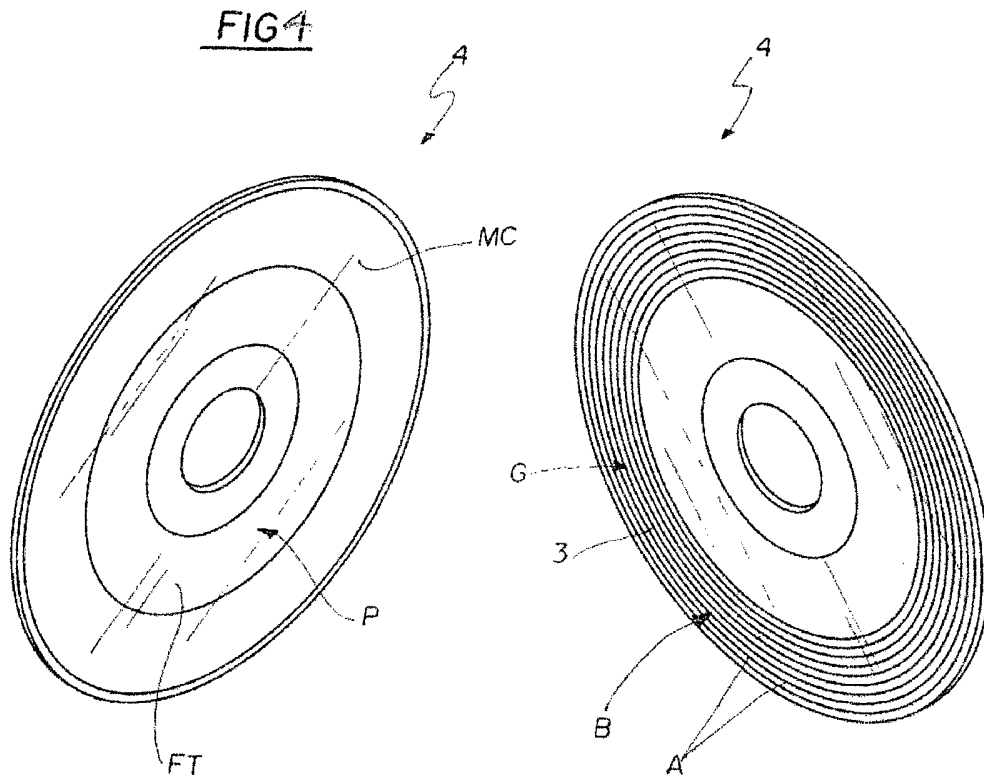


FIG. 3



INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER IPC ⁷ : G11B 20/00 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) IPC ⁷ : G11B 20/00, 23/28		
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) EPODOC, PAJ, WPI		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 100 32 604 A1 (G. TURHAN) 17 January 2002 (17.01.2002) <i>abstract; claims; figures 1, 2.</i> --	1
A	EP 1 076 336 A2 (DCS DESARROLLOS TECNOLOGICOS S.A.) 14 February 2001 (14.02.2001) <i>abstract; claims 24, 30; figure 6.</i> --	1
A	EP 0 984 346 A1 (HITACHI EUROP LIMITED) 8 March 2000 (08.03.2000) <i>abstract; figure 5.</i> --	1
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" 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 "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 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 11 October 2004 (11.10.2004)		Date of mailing of the international search report 18 October 2004 (18.10.2004)
Name and mailing address of the ISA/ AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna Facsimile No. +43 / 1 / 534 24 / 535		Authorized officer ERBER H. Telephone No. +43 / 1 / 534 24 / 410

INTERNATIONAL SEARCH REPORT

International application No.
PCT/BR 2004/000151

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/0041243 A1 (N.E.R. OLGUIN et al.) 27 February 2003 (27.02.2003) <i>abstract; claims 19 to 34.</i>	1
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A	US 2002/0118838 A1 (V.S. BELENKO et al.) 29 August 2002 (29.08.2002) <i>abstract; claims.</i>	1
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A	US 2002/0114265 A1 (J.J. HART III et al.) 22 August 2002 (22.08.2002) <i>Abstract; [0007] to [0033];claims</i>	1
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A	US 6 539 475 B1 (I.J. COX et al.) 25 March 2003 (25.03.2003) <i>abstract; clasims.</i>	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/BR 2004/000151

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EP	A	984346	US	B	6782190	2004-08-24
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			EP	A	0984346	2000-03-08
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			JP	A	2001093228	2001-04-06
			BR	A	0003321	2001-03-13
			AU	A	4716300	2001-02-22
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US	A	20020118 838		none		
US	A	20030041 243		none		
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			CA	A	2321255	2000-06-29
			EP	A	1110400	2001-06-27
			WO	A	0038426	2000-06-29