Patent Search

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Abstract:

A system for AI-based intelligent piracy content tracing apparatus is the proposed invention that focuses on identifying the pirated contents of movies or videos from theatres or OTT platforms. The invention aims at identifying the location of theatres from which the particular frame is pirated and thus helps police t track down the culprit. An artificial intelligence integrated system is able to download the frame bit as added to it and the system will help find the pirated content. When uploaded into the software the piracy content is recognized along with the location of the theatres or OTT platform using the login ID.

Complete Specification

Claims:1. A system for AI-based intelligent piracy content tracking apparatus comprises of an artificial intelligence unit;
an input frame unit;
an output frame unit;
a mobile phone;
and a piracy detection unit;

2. A system for AI-based intelligent piracy content tracking apparatus, according to claim 1, includes an input frame unit, a frame wherein an input frame unit is used to encode the movie content with unique identification bits so that the piracy can be tracked down easily.

3. A system for AI-based intelligent piracy content tracking apparatus, according to claim 1, includes an output frame unit, wherein the output frame unit, decodes the encoded frame bit that is attached by the input frame unit. If in case there is a change in decoding then the piracy is confirmed.

4. A system for AI-based intelligent piracy content tracking apparatus, according to claim 1, includes a mobile phone, wherein the mobile phone, is the registered mobile number of the concerned person on which the alert messages regarding the piracy are sent.
5. A system for AI-based intelligent piracy content tracking apparatus, according to claim 1, includes a piracy detection unit, wherein the piracy detection unit, detects the

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Department for Promotion of Industry and Internal Trade
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TITLE OF INVENTION	A SYSTEM FOR AI-BASED INTELLIGENT PIRACY CONTENT TRACKING APPARATUS
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FORM 2

THE PATENTS ACT, 1970

(39 OF 1970)

AND

THE PATENT RULES, 2003

COMPLETE SPECIFICATION

(See section 10 and rule 13)

Title of Invention:

"A SYSTEM FOR AI-BASED INTELLIGENT PIRACY CONTENT TRACKING APPARATUS"

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The following specification describes the invention and the manner in which it is to be performed

FIELD OF INVENTION

The present invention relates to the field of a system for artificial intelligence-based intelligent piracy content tracking apparatus. The invention focuses on identifying the movie from which theatres or OTT platforms the particular movie frame has pirated.

BACKGROUND OF INVENTION

[0001] Background description includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

[0002] In this era, piracy of movies from theatres is the most concerning issue for movie producers and well as distributors. Piracy is an act of robbery or criminal violence. Video piracy takes place when a film is produced in the form of a video cassette without proper authorization from the right holder i.e., the producer. Online piracy is the practice of downloading and distributing copyrighted content digitally without permission such as music, movie, or software.

[0003] Though the laws on copyright protection are clear and the penalties are heavy, they are still issues regarding the piracy of movie content from theatre or OTT platforms. Online piracy has led to improvements into file-sharing

technology that has bettered information distribution as a whole. Because pirated copies of software are expected to attract customers who are sensitive to price, it may not be the business's best interest to engage in extraneous price wears with their competition or invest heavily in an anti-piracy campaign to win target customers.

[0004] A number of different types of systems to identify piracy are known in the prior art. For example, the following patents are provided for their supportive teachings and are all incorporated by reference.

[0005] US8126832B2 An artificial intelligence system and method for interpreting input from a user and generating a response to the user. The input is converted into an array of concepts which are compared to a database of interrelated concepts. A response is generated based on the concepts in the database and their relationship to the concepts in the input array. The system and method may be implemented in a number of electronic or computer devices to interact with humans or computer systems.

[0006] The proposed invention is a system for artificial intelligence-based intelligent piracy content tracking apparatus that checks for the piracy of movies from theatres or online i.e., OTT platform. The invention tracks down from where the particular frame of the movie is pirated. An artificial intelligence

integrated system is embedded with the movie screening frame that will be able to download piracy content and compare it with the input content. The invention will insert small visual-based data like unique numbers and frame cropping in frames while movies are running in theatres.

[0007] The above information is presented as background information only to assist with an understanding of the present disclosure. No determination has been made, no assertion is made, and as to whether any of the above might be applicable as prior art with regard to the present invention.

[0008] In view of the foregoing disadvantages inherent in the known types of piracy detection systems now present in the prior art, the present invention provides an improved system. As such, the general purpose of the present invention, which will be described subsequently in greater detail, is to provide a new and improved system that can be applied to both OTT platform as well as movie theaters that has all the advantages of the prior art and none of the disadvantages.

SUMMARY OF INVENTION

[0009] In view of the foregoing disadvantages inherent in the known types of systems to monitor the piracy of video content now present in the prior art, the present invention provides an improved system that scales well for both theater and Online platforms. As such, the general purpose of the present invention,

which will be described subsequently in greater detail, is to provide a new and improved AI integrated system that has all the advantages of the prior art and none of the disadvantages.

[0010] The main objective of the proposed system for AI-based intelligent piracy content tracking apparatus is to design and implement a system that reduces the risk associated with pirating video or movie content. The invention focuses on identifying the content from where the frame has been pirated and thus helps in tracking the culprit immediately. The proposed invention will be a relief for movie producers and distributors.

[0011] Yet another aspect of the proposed invention is that the movie frames are embedded with input code for the purpose of encoding it. The artificial intelligence integrated unit is used to detect the frame of video content that has been pirated. The movie content is decoded with deciphering and thus protected. The piracy directed will send an alert message to the registered mobile phone of the concerned person.

[0012] In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the various

ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

[0013] These together with other objects of the invention, along with the various features of novelty that characterize the invention, are pointed out with particularity in the disclosure. For a better understanding of the invention, its operating advantages, and the specific objects attained by its uses, reference should be had to the accompanying drawings and descriptive matter in which there are illustrated preferred embodiments of the invention.

BRIEF DESCRIPTION OF DRAWINGS

[0014] The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

Figure 1 illustrates the schematic view of a system for AI-based intelligent piracy content tracking apparatus, according to the embodiment herein.

Figure 2 illustrates the flow diagram of a system for AI-based intelligent piracy content tracking apparatus, according to the embodiment herein.

DETAILED DESCRIPTION OF INVENTION

[0015] In the following detailed description, reference is made to the accompanying drawings which form a part hereof, and in which is shown by way of illustration specific embodiments in which the invention may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that the embodiments may be combined, or that other embodiment may be utilized, and that structural and logical changes may be made without departing from the spirit and scope of the present invention. The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is defined by the appended claims and their equivalents.

[0016] While the present invention is described herein by way of example using several embodiments and illustrative drawings, those skilled in the art will recognize that the invention is neither intended to be limited to the embodiments of drawing or drawings described nor intended to represent the scale of the various components. Further, some components that may form a part of the invention may not be illustrated in certain figures, for ease of illustration, and such omissions do not limit the embodiments outlined in any way. It should be understood that the drawings and detailed description thereto are not intended to limit the invention to the particular form disclosed, but on the contrary, the

invention covers all modification/s, equivalents, and alternatives falling within the spirit and scope of the present invention as defined by the appended claims. The headings are used for organizational purposes only and are not meant to limit the scope of the description or the claims. As used throughout this description, the word "may" be used in a permissive sense (i.e., meaning having the potential to), rather than the mandatory sense (i.e., meaning must). Further, the words "a" or "a" mean "at least one" and the word "plurality" means one or more unless otherwise mentioned. Furthermore, the terminology and phraseology used herein are solely used for descriptive purposes and should not be construed as limiting in scope. Language such as "including," "comprising," "having," "containing," or "involving," and variations thereof, is intended to be broad and encompass the subject matter listed thereafter, equivalents, and any additional subject matter not recited, and is not intended to exclude any other additives, components, integers or steps. Likewise, the term "comprising" is considered synonymous with the terms "including" or "containing" for applicable legal purposes. Any discussion of documents acts, materials, devices, articles, and the like are included in the specification solely for the purpose of providing a context for the present invention.

[0017] In this disclosure, whenever an element or a group of elements is preceded with the transitional phrase "comprising", it is understood that we also contemplate the same element or group of elements with transitional phrases

"consisting essentially of, "consisting", "selected from the group consisting of", "including", or "is" preceding the recitation of the element or group of elements and vice versa.

[0018] Avoiding the piracy of movies from theatres and OTT platform is the most tedious task for movie producers, distributors as well as theatres owners. There is a need for an invention that will help detect and avoid the piracy of video content. The proposed invention enables a feature that helps to identify where, when, and how that particular content has been pirated. For this to be implemented, an artificial intelligence integrated system is used to achieve the same. The concept of encoding and decoding the input frame content and output frame concept with cipher is used to achieve the proposed invention.

[0019] The proposed invention focuses on designing and implementing an artificial intelligence integrated based system to identify where and when the particular movie content has been pirated. The invention is applicable for the video content that is screened both in theatres as well as OTT. The movie content is embedded with an input frame bit which is nothing but encoding. The content is then fed to the output frame to detect the piracy content if found any. It in case there is a detection of piracy content action will be taken immediately against that particular person or theatre owner.

[0020] Reference will now be made in detail to the exemplary embodiment of

the present disclosure. Before describing the detailed embodiments that are in accordance with the present disclosure, it should be observed that the embodiment resides primarily in combinations arrangement of the system according to an embodiment herein and as exemplified in FIG. 1

[0021] Figure 1 illustrates the schematic view of a system for AI-based intelligent piracy content tracking apparatus 100. The input frame bit 102 is inserted into the video clip that will be screened in a particular screen or OTT platform. There is a unique ID that is embedded with input frame bit 102, so that it will be easier to identify from which particular theatres or login ID of OTT id the movie pirated. The output frame 103 is scanned for piracy with the help of artificial intelligence integrated unit 104. The piracy direction unit 105 will send alert messages to the registered mobile number of the concerned person such that immediate action can be taken to avoid the circulation of pirated content.

[0022] Figure 2 illustrates the flow diagram of a system for AI-based Telligent piracy content tracking apparatus, whenever the movie clip is screened on theatres or an OTT platform, first it is encoded with input frame bit. The input frame bit is a unique identification number that is used to identify the theatre from which the movie content is pirated. The output frame bit decodes the input frame to detect the piracy content. If any piracy is found, it can be immediately tracked down from which theatre it has happened by sending an alert message

to the registered mobile number of the concerned person.

[0023] In the following description, for the purpose of explanation, numerous specific details are set forth in order to provide a thorough understanding of the arrangement of the system according to an embodiment herein. It will be apparent, however, to one skilled in the art that the present embodiment can be practiced without these specific details. In other instances, structures are shown in block diagram form only in order to avoid obscuring the present invention.

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WE CLAIM

1. A system for AI-based intelligent piracy content tracking apparatus comprises of an artificial intelligence unit;
   an input frame unit;
   an output frame unit;
   a mobile phone;
   and a piracy detection unit;

2. A system for AI-based intelligent piracy content tracking apparatus, according to claim 1, includes an input frame unit, a frame wherein an input frame unit is used to encode the movie content with unique identification bits so that the piracy can be tracked down easily.

3. A system for AI-based intelligent piracy content tracking apparatus, according to claim 1, includes an output frame unit, wherein the output frame unit, decodes the encoded frame bit that is attached by the input frame unit. If in case there is a change in decoding then the piracy is confirmed.

4. A system for AI-based intelligent piracy content tracking apparatus, according to claim 1, includes a mobile phone, wherein the mobile phone, is the registered mobile number of the concerned person on which the alert messages regarding the piracy are sent.

5. A system for AI-based intelligent piracy content tracking apparatus, according to claim 1, includes a piracy detection unit, wherein the piracy detection unit, detects the content that is pirated along with the details of theatre or login ID of the user in case of OTT platform from which the content has been pirated.

6. A system for AI-based intelligent piracy content tracking apparatus, according to claim 1, includes an artificial intelligence unit, wherein the artificial intelligence unit is used to monitor the input frame unit and the output frame unit automatically.

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ABSTRACT

A SYSTEM FOR AI-BASED INTELLIGENT PIRACY CONTENT TRACKING APPARATUS

A system for AI-based intelligent piracy content tracing apparatus is the proposed invention that focuses on identifying the pirated contents of movies or videos from theatres or OTT platforms. The invention aims at identifying the location of theatres from which the particular frame is pirated and thus helps police t track down the culprit. An artificial intelligence integrated system is able to download the frame bit as added to it and the system will help find the pirated content. When uploaded into the software the piracy content is recognized along with the location of the theatres or OTT platform using the login ID.