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- (71) **Applicant (for all designated States except US):** SIRIUS XM RADIO INC. [US/US]; 1221 Avenue Of The Americas, New York, NY 10020 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** COX, Stuart, A. [US/US]; 1311 Sw Mulberry Way, Boca Raton, FL 33486 (US). CONNERS, Gary, John [US/US]; 33 Whipoorwill Way, Belle Mead, NJ 08502 (US). VANZANDT, Todd [US/US]; 837 Avenida Loma Vista, San Dimas, CA 91773 (US).
- (74) **Agents:** HALEVA, Aaron et al.; Kramer Levin Naftalis & Frankel LLP, 1117 Avenue Of The Americas, New York, NY 10036 (US).

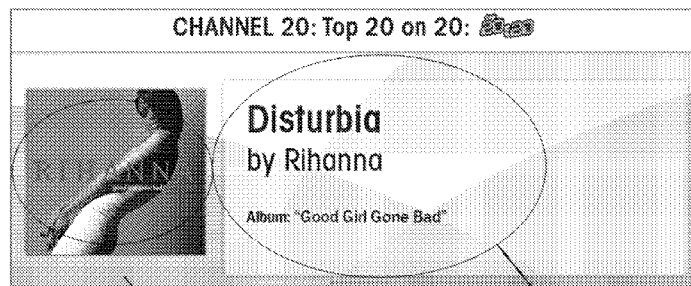
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(54) **Title:** SYSTEMS AND METHODS FOR INTERACTION OF SATELLITE AND INTERNET PROTOCOL FEATURES IN CONTENT DELIVERY SYSTEMS ("SATELLITE-IP INTERACTIONS")



Received over IP

FIG. 1

From SAT Radio

(57) **Abstract:** Systems and methods for interaction of satellite and Internet protocol features in content delivery systems are presented. Using such systems and methods, the delivery of some content to the same product by Satellite delivery, other content by IP delivery, and still other content by both Satellite and IP delivery can enhance the utility of both the content and the product for an end user and can further optimize the costs and quality of service associated with delivering the content. A method of providing content and data to a combined satellite and IP network receiver is presented, including broadcasting via satellite content and data to the receiver, and sending via an IP based communications network content and data to the receiver, where the content and data provided over the Satellite broadcast enables capabilities of the receiver needed to consume content received by IP delivery, and the content and data provided via IP delivery enables capabilities of the receiver needed to consume content received from the satellite broadcast.



**A. CLASSIFICATION OF SUBJECT MATTER*****H04N 21/2381(2011.01)i, H04N 21/233(2011.01)i, H04N 21/60(2011.01)i***

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)

H04N 21/2381; H04N 7/18; H04N 7/173; H04Q 11/04; H04N 7/16; H04M 11/00

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) &amp; Keywords: satellite, IP, content, receiver

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 7921443 B2 (PHILLIPS BRUCE A. et al.) 05 April 2011 See column 27, line 32 - column 29 line 61; figure 7 and claim 1.	1,7-13,16-19 2-6,14,15
X A	US 2007-0266414 A1 (RAYNOLD M. KAHN et al.) 15 November 2007 See paragraphs [0055]-[0058]; figure 1 and claims 1,3,4,9.	1,7-13,16-19 2-6,14,15
A	US 2009-0178095 A1 (ZUO MINGLEI) 09 July 2009 See paragraphs [0030]-[0033],[0062]-[0066]; figures 1,4 and claims 1,9.	1-19
A	US 6411616 B1 (DONAHUE; PAUL W. et al.) 25 June 2002 See column 11, line 36 - column 14, line 5; figures 4,5 and claim 1.	1-19

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

\* Special categories of cited documents:

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"&amp;" document member of the same patent family

Date of the actual completion of the international search

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189 Cheongsu-ro, Seo-gu, Daejeon Metropolitan  
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Authorized officer

KANG, Suk Je

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Information on patent family members

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**PCT/US2012/046969**

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