IEC 62227

Edition 1.0 2008-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Multimedia home server systems – Digital rights permission code

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Systèmes serveurs multimédia domestiques – Codes numériques des autorisations des droits

IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7e4c621332ed/iec-62227-2008

IEC 62227:2008

THIS PUBLICATION IS COPYRIGHT PROTECTED
Copyright © 2008 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester.
If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

Droits de reproduction réservés. Sauf indication contraire, aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de la CEI ou du Comité national de la CEI du pays du demandeur.
Si vous avez des questions sur le copyright de la CEI ou si vous désirez obtenir des droits supplémentaires sur cette publication, utilisez les coordonnées ci-après ou contactez le Comité national de la CEI de votre pays de résidence.

IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

Useful links:

iTeh STANDARD PREVIEW
(standards.iteh.ai)

IEC publications search - www.iec.ch/searchpub

The advanced search enables you to find IEC publications by a variety of criteria (reference number, text, technical committee,…).
It also gives information on projects, replaced and withdrawn publications.

IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-5adc621332ed/iec-62227-2008

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available on-line and also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing more than 30 000 terms and definitions in English and French, with equivalent terms in additional languages. Also known as the International Electrotechnical Vocabulary (IEV) on-line.

Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: csc@iec.ch.

A propos de la CEI

La Commission Electrotechnique Internationale (CEI) est la première organisation mondiale qui élabore et publie des Normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

A propos des publications CEI

Le contenu technique des publications de la CEI est constamment revu. Veuillez vous assurer que vous possédez l'édition la plus récente, un corrigendum ou amendement peut avoir été publié.

Liens utiles:

Recherche de publications CEI - www.iec.ch/searchpub

La recherche avancée vous permet de trouver des publications CEI en utilisant différents critères (numéro de référence, texte, comité d'études,…).
Elle donne aussi des informations sur les projets et les publications remplacées ou retirées.

Just Published CEI - webstore.iec.ch/justpublished

Restez informé sur les nouvelles publications de la CEI. Just Published détaille les nouvelles publications parues. Disponible en ligne et aussi une fois par mois par email.

Electropedia - www.electropedia.org

Le premier dictionnaire en ligne au monde de termes électroniques et électriques. Il contient plus de 30 000 termes et définitions en anglais et en français, ainsi que les termes équivalents dans les langues additionnelles. Egalement appelé Vocabulaire Electrotechnique International (VEI) en ligne.

Service Clients - webstore.iec.ch/csc

Si vous désirez nous donner des commentaires sur cette publication ou si vous avez des questions contactez-nous: csc@iec.ch.

IEC 62227

Edition 1.0 2008-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Multimedia home server systems – Digital rights permission code

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Systèmes serveurs multimédia domestiques – Codes numériques des autorisations des droits

IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7e4c621332ed/iec-62227-2008

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE
CODE PRIX XB

ICS 33.160.60; 35.240.99

ISBN 978-2-83220-315-6

Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

® Registered trademark of the International Electrotechnical Commission
Marque déposée de la Commission Electrotechnique Internationale

CONTENTS

FOREWORD 6
INTRODUCTION 8
1 Scope 9
2 Normative references 9
3 Terms, definitions and abbreviations 9
3.1 Terms and definitions 9
3.2 Abbreviated terms 15
4 Permission code framework 16
4.1 General 16
4.2 Assumptions associated with the permission code 17
4.2.1 Binary relationships within the content distribution value chain 17
4.2.2 Permission issued for a group of content 17
4.2.3 Common code center for permissions 18
4.2.4 Usage report 18
4.2.5 Application scenario of the permission code 18
4.2.6 Harmonization with DRM systems 19
4.3 Components of a permission code 19
4.3.1 Permission actor 19
4.3.2 Permission classification 22
4.3.3 Content usage 22
4.3.4 Content data handling 23
5 Permission code configuration 24
5.1 General 24
5.2 Notation 25
5.2.1 Numerical values 25
5.3 Permission code system 25
5.4 Version unit 26
5.4.1 Structure 26
5.4.2 Version unit tag 26
5.4.3 Reserved 27
5.4.4 Version 27
5.5 Permission actor unit 27
5.5.1 Structure 27
5.5.2 Permission actor unit tag 27
5.5.3 Total bytes of identifiers 27
5.5.4 Content identifier 28
5.5.5 Issuer identifier 29
5.5.6 Receiver identifier 31
5.6 Permission classification unit† 32
5.6.1 Structure 32
5.6.2 Permission classification unit tag 32
5.6.3 Reserved 32
5.6.4 Disclosure class 32
5.6.5 Usage purpose class 33
5.6.6 Charge model class 34
5.6.7 Billing class 34

iTeh STANDARD PREVIEW
(standards.iteh.ai)
IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7c4c621332ed/iec-62227-2008

5.6.8 Application class 35
5.6.9 Sponsor class 35
5.6.10 Territory class 36
5.6.11 Usage class 36
5.7 General usage condition unit 39
5.7.1 Unit structure 39
5.7.2 General usage condition header 39
5.7.3 General usage condition descriptor 39
5.8 Extended use condition unit 48
5.9 Data management condition unit 49
5.9.1 Unit structure 49
5.9.2 Data management condition header 49
5.9.3 Data management condition 50
5.10 Data export condition unit 52
5.10.1 Unit structure 52
5.10.2 Data export condition header 52
5.10.3 Data export condition descriptor 52
5.10.4 General export descriptor 53
Annex A (informative) Permission code requirements for home servers and playback devices 57
Annex B (informative) Use-case scenario 62
Annex C (informative) Issuing a permission code 70

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Figure 1 – Permission code environment 17
Figure 2 – Permission code environment 23
Figure 3 – Permission code configuration 26
Figure 4 – Basic structure of permission code unit 26
Figure 5 – General usage condition unit 39
Figure 6 – Data management condition unit 49
Figure 7 – Data export condition unit 52
Figure A.1 – Permission code and domain 58
Figure A.2 – Re-issuing permission information 59
Figure A.3 – Re-issuing permission among permission code compliant objects is allowed 60
Figure A.4 – Re-issuing permission within a domain is allowed 60
Figure A.5 – Other conditions 61
Figure B.1 – Permission code structuring (1/2) 62
Figure B.2 – Permission code structuring (2/2) 63
Figure B.3 – Permission code example with respect to FairPlay (1/2) 63
Figure B.4 – Permission code example with respect to FairPlay (2/2) 64
Figure B.5 – Permission code example with respect to CPRM (1/2) 65
Figure B.6 – Permission code example with respect to CPRM (2/2) 65
Figure B.7 – Permission code example with respect to SAFIA (1/2) 66
Figure B.8 – Permission code example with respect to SAFIA (2/2) 66
Figure B.9 – Permission code example with respect to PC distribution (streaming) 67

IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7e4c621332ed/iec-62227-2008

Figure B.10 – Permission code example with respect to PC distribution (download) (1/2) 68
Figure B.11 – Permission code example with respect to PC distribution (download) (2/2) 68
Figure B.12 – Permission code example with respect to ringtones (1/2) 69
Figure B.13 – Permission code example with respect to ringtones (2/2) 69
Figure C.1 – The flow of issuing a permission code to grant access to a single piece of content (for access on a home server) 70
Figure C.2 – The flow of issuing a permission code to grant access to a single piece of content (for access on a client device) 71
Figure C.3 – The flow of issuing a permission code to grant access to subscription content (for access on a home server) 72
Figure C.4 – The flow of issuing a permission code to grant access to subscription content (for access on a client device) 73

Table 1 – Distinct tag interpretation 25
Table 2 – Structure of version unit 26
Table 3 – Structure of permission actor unit 27
Table 4 – Structure of content identifier descriptor 28
Table 5 – Content type code interpretation 28
Table 6 – Structure of issuer identifier descriptor 29
Table 7 – Issuer role code interpretation 30
Table 8 – Issuer configuration code interpretation 30
Table 9 – Structure of receiver identifier descriptor 31
Table 10 – Receiver role code interpretation 31
Table 11 – Receiver configuration code interpretation 31
Table 12 – Structure of permission classification unit 32
Table 13 – Structure of disclosure class 33
Table 14 – disclosure_type (DT) interpretation 33
Table 15 – Structure of usage purpose class 33
Table 16 – usage_purpose_type (UPT) interpretation 33
Table 17 – Structure of charge model class 34
Table 18 – charge_model_type (CMT) interpretation 34
Table 19 – Structure of billing class 35
Table 20 – billing_type (BT) interpretation 35
Table 21 – Structure of application class 35
Table 22 – application_type (AT) interpretation 35
Table 23 – Structure of sponsor class 36
Table 24 – Configuration of sponsor_type (ST) 36
Table 25 – Structure of territory class 36
Table 26 – Structure of usage class 37
Table 27 – Usage_type (UT) interpretation 37
Table 28 – Configuration of redistribution_Type 38
Table 29 – Structure of general usage condition header 39
Table 30 – Tag values of descriptors 40

iTeh STANDARD PREVIEW
(standards.iteh.ai)
IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7ade62b132ed/iec-62227-2008

Table 31 – Structure of playback usage condition descriptor 40
Table 32 – Structure of print usage condition descriptor 43
Table 33 – Structure of execute usage condition descriptor 46
Table 34 – Structure of data management condition header 49
Table 35 – Structure of data management condition 50
Table 36 – Structure of encryption flag (EF) 50
Table 37 – Transcode type interpretation 51
Table 38 – Structure of time-line flag (TF) 51
Table 39 – Structure of data export condition header 52
Table 40 – Tag values of descriptors 53
Table 41 – Structure of general export descriptor 53
Table 42 – storage_media_type (SMT) interpretation 54
Table 43 – encoding_type (ET) interpretation 54
Table 44 – protection_type (PT) interpretation 55
Table 45 – control_type (CT) interpretation 55

iTeh STANDARD PREVIEW
(standards.iteh.ai)
IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7e4c621332ed/iec-62227-2008

INTERNATIONAL ELECTROTECHNICAL COMMISSION

MULTIMEDIA HOME SERVER SYSTEMS – DIGITAL RIGHTS PERMISSION CODE

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical Content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7e4c621332ed/iec-62227-2008

International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this document may involve the use of patent.

IEC takes no position concerning the evidence, validity and scope of these patent rights.

The holder of this patent right has assured IEC that it is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holders of these patent rights are registered with IEC. Information may be obtained from:

DENTSU INC.
Media Marketing Division
1-8-1, Higashi-shimbashi, Minato-ku, Tokyo 105-7001
JAPAN

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights other than those identified above. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62227 has been prepared by technical area 8: Multimedia home server systems, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This bilingual version (2012-11) corresponds to the monolingual English version, published in 2008-06.

The text of this standard is based on the following documents:

CDV	Report on voting
100/1287/CDV	100/1374/RVC

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

The French version of this standard has not been voted upon.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7e4c621332ed/iec-62227-2008

INTRODUCTION

The common ID system is used to systematically identify every entity, device and content that would be involved in the course of digitally distributing content. The permission code can express various sets of permission information and permission conditions necessary for content transmission in a remarkably short code form. The permission code is not defined from a technical perspective, but rather on the basis of permission information that rights holders actually employ in the field, even if the permission code is recognized for its technical effectiveness with respect to digital distribution of content.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7e4c621332ed/iec-62227-2008

MULTIMEDIA HOME SERVER SYSTEMS – DIGITAL RIGHTS PERMISSION CODE

1 Scope

This International Standard defines the permission code, a set of permission related information in short code form, primarily intended for home server systems. The permission code is comprised of a common ID system (content ID, issuer ID, receiver ID, device ID, etc.) and a narrowly-defined permission code.

The common ID system is used to systematically identify every entity, device and content that would be involved in the course of digitally distributing content. The permission code can express various sets of permission information and permission conditions necessary for content transmission in a remarkably short code form. The permission code is not defined from a technical perspective, but rather on the basis of permission information that rights holders actually employ in the field. Even after, the permission code is recognized for its technical effectiveness with respect to digital distribution of content.

2 Normative references

iTeh STANDARD PREVIEW
(standards.iteh.ai)

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7e4c621332ed/iec-62227-2008

ISO 3166-1:2006, *Codes for the representation of names of countries and their subdivisions – Part 1: Country codes*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document the following terms and definitions apply.

3.1.1
permission
act by a certain issuing entity to authorize use for content to a certain receiving entity under a certain set of permission classifications and usage conditions

NOTE The issuing entity and/or the receiving entity may not only be human, but also a device, storage medium, organization, domain or another entity.

3.1.2
permission management server
a server that issues a permission code based on a permission agreement

NOTE The server is equipped with a

a) license server,
b) a function that forwards the permission code to a distribution server, and
c) a function that receives a content usage report from the license server and the distribution server.

3.1.3
compliant license server
a server that issues a license based on a permission code

NOTE The server is equipped with

a) a server system (including home server),
b) a function that generates necessary keys for content access based on a permission code, and
c) a function that forwards the license to a client device. A license contains information about the content's permitted scope of use based on a permission code.

3.1.4
license server
a compliant license server (unless otherwise specified, a compliant license server is simply referred to as a license server)

3.1.5
compliant license
license issued by a compliant license server

3.1.6
license
a compliant license (unless otherwise specified, a compliant license is simply referred to as a license)

3.1.7
home server
client device that serves as a gateway for a home domain

3.1.8
client device
device that becomes the actor of content access and is compliant with permission code terms

iTeh STANDARD PREVIEW
(standards.iteh.ai)
IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/460e7763-8d2d-4d7d-b09f-7e4c621332ed/iec-62227-2008

3.1.9
compliant device
device that possesses the function to control content access based upon a compliant license

3.1.10
domain
set of actors to which a common set of rules apply in the context of content management

3.1.11
home domain
home-based content usage environment, permitted by rights holders

3.1.12
legacy device
non-compliant device that does not control content access based upon compliant licenses

3.1.13
disclosure type
permission classification that specifies the disclosure class for the permission, including open permission and closed permission

3.1.14
open permission
permission under disclosure type that is received according to previously arranged default conditions

3.1.15
closed permission
permission under disclosure type that is received through a separate, individually negotiated contract

3.1.16
application type
permission classification that specifies the application class for the permission, including ad hoc permission and blanket permission

3.1.17
ad hoc permission
an application type that grants permissions on a per usage unit basis

3.1.18
blanket permission
an application type that grants permissions in aggregate for use within a given time period

NOTE Time periods may include monthly, annual or other time increments.

3.1.19
billing type
permission classification that specifies the billing class for the permission, including ad hoc billing and blanket billing

3.1.20
ad hoc billing
billing type that bills on a per content basis

iTeh STANDARD PREVIEW
(standards.iteh.ai)

3.1.21
blanket billing
billing type that bills on monthly, annual or other time-based increments

IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7c4c621532dd/iec-62227-2008

3.1.22
usage purpose type
permission classification that specifies the usage purpose class for the permission, including commercial, public, not-for-profit, promotion

3.1.23
commercial permission
usage purpose type that permits use for commercial purposes

3.1.24
public permission
usage purpose type that permits use for public purposes

3.1.25
not-for-profit permission
usage purpose type that permits use for non-profit purposes

3.1.26
promotion permission
usage purpose type that permits use for promotional purposes

3.1.27
charge model type
permission classification that specifies the charge model class for the permission, including pay and free, etc.

3.1.28
pay permission
charge model type that permits use for charge

3.1.29
free permission
charge model type that permits use free of charge

3.1.30
pay per use
pay permission that charges per use

3.1.31
subscription
pay permission that charges per time period

3.1.32
coupon
pay permission that uses coupons, a form of pseudo-currency that can be exchanged with a given piece of content

NOTE A coupon is distributed to users by the content's sponsor in order to increase user contact with said sponsor.

3.1.33
sponsor type
permission classification that specifies the sponsor class for the permission, including advertising model, premium model, coupon model and personal information disclosure model

iTeh STANDARD PREVIEW
(standards.iteh.ai)

3.1.34
advertising model
a sponsor type that specifies the advertising reception mode

IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7e4c621332ed/iec-62227-2008

3.1.35
time synchronized forced viewing
advertising model that forces the synchronization of advertising viewing and content access

3.1.36
pre/post viewing
advertising model that forces advertising viewing pre/post access

3.1.37
arbitrary time
advertising model that allows for arbitrary advertising viewing, a kind of viewing in which users are allowed to choose their favorite timing to view advertising

3.1.38
blanket
advertising model that forces advertising viewing across the board, whereby the terms of advertising viewing and content access will apply to a broad scope of services associated with the content

NOTE Under blanket, advertising viewing is a condition upon which content access is allowed. However, the timing in which advertising is viewed is not limited to those that are synchronized with content. For example, a user may be allowed to access content after viewing a special advertising channel.

3.1.39
premium model
sponsor type that uses content for premium purposes, whereby, "premium" refers to a promotional practice in which a sponsor provides content access to a user as reward for the user's contact with said sponsor

3.1.40
coupon model
sponsor type that uses content as a gift for coupons

NOTE A coupon is distributed by the content's sponsor in order to increase user contact with said sponsor. That is promotional practice in which coupon, a form of pseudo-currency, is exchanged with contents.

3.1.41
personal information disclosure model
sponsor type that deems personal information disclosed as consideration for content access

3.1.42
usage type
permission classification that specifies the usage class for the permission, including broadcast permission and streaming permission

3.1.43
territory ID
identifier that specifies the territory for the permission, including country and area

3.1.44
redistribution type
permission classification that specifies the redistribution class for the permission, including simultaneous redistribution, programmed streaming and on-demand streaming

iTeh STANDARD PREVIEW
(standards.iteh.ai)

3.1.45
non-fixation permission
usage type that permits content use without storage

IEC 62227:2008
https://standards.iteh.ai/catalog/standards/sist/d60a7763-8d2d-4fa7-b09f-7e4c621332ed/iec-62227-2008

3.1.46
fixation permission
usage type that permits content use with storage

3.1.47
broadcast permission
usage type that permits broadcast use of content

3.1.48
streaming permission
usage type that permits streaming use of content

3.1.49
broadcast storage permission
usage type that permits broadcast use of content with storage

3.1.50
download permission (on-demand)
usage type that permits broadcast use of content with storage and delivery on-demand

3.1.51
redistribution permission
usage type that permits content use with redistribution

3.1.52
programmed streaming
redistribution permission and/or a streaming permission for content streamed in accordance with program listings