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**Information processing — Text and office
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Part 10: Formal specifications
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**AMENDMENT 2: Formal specification of the Raster
Graphics content architectures**
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Traitement de l'information — Bureautique — Architecture des documents de bureau (ODA) et format d'échange —

Partie 10: Spécifications formelles

AMENDEMENT 2: Spécification formelle de l'architecture des contenus des caractères graphiques à raster



Reference number
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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

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Amendment 2 to International Standard ISO/IEC 8613-10 : 1991 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

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Annex D

(normative)

Formal specification of the raster graphics content architectures

D.1 Introduction

This annex gives a formal specification of the raster graphics content architectures as described in part 7 of ISO 8613. This annex is composed of 5 clauses:

Clause D.1 provides a general introduction, including a list of all definitions which are given in clauses D.2, D.3 and D.4

Clause D.2 provides the interface to the document profile and its formal specification.

Clauses D.3 and D.4 provide the interface to the document architecture by giving a formal specification of raster graphics presentation attributes and content portion attributes that apply to raster graphics content portions.

Clause D.5 is an index to the terms (definitions, operators, attribute names) used in clauses D.2, D.3 and D.4.

At any time a clause number is specified in the semi-formal descriptions this refers to a clause number in ISO 8613-7.

What follows is the outline of the formula which specifies the raster graphics content architecture. The dots indicate formal text fragments which have been left out for the sake of readability. The full formula can be obtained by replacing each line (apart from the *and*) with the definition which is referenced by the superscript of the predicate symbol or operator symbol, respectively. The variables used in the definition of the predicate have to be replaced by those appearing in the outline (if they are different).

NOTE — A definition is a formula, hence it may never yield an undefined result, whatever value has been inserted for the variable.

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... IsDefaultableRasterGraphicsContentArchitectureAttribute^{7.1}(*att*) ...
and ... IsRasterGraphicsCodingSpecification^{7.2}(*v*) ...
and ... IsRasterGraphicsPresentationFeature^{7.3}(*v*) ...
and ... SatisfiesRasterGraphicsContentArchitectureConstraints^{7.4}(*prof, doby*) ...
and ... IsFormattedProcessableRasterGraphicsContent^{7.5}(*cont*) ...
and ... IsFormattedRasterGraphicsContent^{7.6}(*cont*) ...
and ... IsRasterGraphicsContentPortionDescription^{7.7}(*cont*) ...
and ... IsRasterGraphicsContentPresentationAttribute^{7.8}(*att*) ...
and ... IsRasterGraphicsContentCodingAttribute^{7.9}(*att*) ...
and ... IsRasterGraphicsContentPortionAttributeSet^{7.10}(*as*) ...
and ... IsClippingValue^{7.11}(*v*) ...
and ... IsRasterGraphicsLineProgressionValue^{7.12}(*v*) ...
and ... IsPelPathValue^{7.13}(*v*) ...
and ... IsRasterGraphicsInitialOffsetValue^{7.14}(*v*) ...
and ... IsPelTransmissionDensityValue^{7.15}(*v*) ...
and ... IsImageDimensionsValue^{7.16}(*v*) ...
and ... IsPelSpacingValue^{7.17}(*v*) ...
and ... IsSpacingRatioValue^{7.18}(*v*) ...
and ... IsRasterGraphicsContentArchitectureClassValue^{7.19}(*v*) ...
and ... IsRasterGraphicsContentTypeOfCodingValue^{7.20}(*v*) ...
and ... IsCompressionValue^{7.21}(*v*) ...
and ... IsNumberOfLinesValue^{7.22}(*v*) ...
and ... IsNumberOfPelsPerLineValue^{7.23}(*v*) ...
and ... IsNumberOfDiscardedPelsValue^{7.24}(*v*) ...
and ... IsRasterGraphicsContentInformationValue^{7.25}(*v*) ...

and ... IsNumberOfLinesPerTileValue^{7.26}(*v*) ...
and ... IsNumberOfPelsPerTileLineValue^{7.27}(*v*) ...
and ... IsTilingOffsetValue^{7.28}(*v*) ...
and ... IsTileTypesValue^{7.29}(*v*) ...
and ... IsTileEncodingValue^{7.30}(*v*) ...

NOTE — Other predicates or operators which are used here, but are defined in clause 6, are not listed here.

D.2 Interface to the Document Profile

Semiformal Description 7.1

Predicate “is a defaultable raster graphics content architecture attribute”

A defaultable raster graphics content architecture attribute is one of the attributes 'clipping', 'compression', 'image dimensions', 'initial offset', 'line progression', 'number of discarded pels', 'number of lines per tile', 'number of pels per line', 'number of pels per tile line', 'pel path', 'pel spacing', 'pel transmission density', 'spacing ratio', 'tile types', 'tiling offset' or 'type of coding' with an appropriate value.

NOTE — This predicate is used in annex B.

Definition 7.1

1 $\forall att$
2 $(\circ \text{IsDefaultableRasterGraphicsContentArchitectureAttribute}(att) \text{ iff}$
3 $\exists n, c$
4 $(\text{att} = [n : c] \text{ and}$
5 $n \in [\text{'clipping'}$; 'compression';
6 'image dimensions'; 'initial offset';
7 'line progression'; 'number of discarded pels';
8 'number of lines per tile'; 'number of pels per line';
9 'number of pels per tile line'; 'pel path';
10 'pel spacing'; 'pel transmission density';
11 'spacing ratio'; 'tile types';
12 'tiling offset'; 'type of coding'] and
13 $(\text{ }_2 n = \text{'clipping' } \text{impl IsClippingValue}^{7.11}(c) \text{ }_2) \text{ and}$
14 $(\text{ }_3 n = \text{'compression' } \text{impl IsCompressionValue}^{7.21}(c) \text{ }_3) \text{ and}$
15 $(\text{ }_4 n = \text{'image dimensions' } \text{impl IsImageDimensionsValue}^{7.16}(c) \text{ }_4) \text{ and}$
16 $(\text{ }_5 n = \text{'initial offset' } \text{impl IsRasterGraphicsInitialOffsetValue}^{7.14}(c) \text{ }_5) \text{ and}$
17 $(\text{ }_6 n = \text{'line progression' } \text{impl IsRasterGraphicsLineProgressionValue}^{7.12}(c) \text{ }_6) \text{ and}$
18 $(\text{ }_7 n = \text{'number of discarded pels' } \text{impl IsNumberOfDiscardedPelsValue}^{7.24}(c) \text{ }_7) \text{ and}$
19 $(\text{ }_8 n = \text{'number of lines per tile' } \text{impl IsNumberOfLinesPerTileValue}^{7.26}(c) \text{ }_8) \text{ and}$
20 $(\text{ }_9 n = \text{'number of pels per line' } \text{impl IsNumberOfPelsPerLineValue}^{7.23}(c) \text{ }_9) \text{ and}$
21 $(\text{ }_{10} n = \text{'number of pels per tile line' } \text{impl IsNumberOfPelsPerTileLineValue}^{7.27}(c) \text{ }_{10}) \text{ and}$
22 $(\text{ }_{11} n = \text{'pel path' } \text{impl IsPelPathValue}^{7.13}(c) \text{ }_{11}) \text{ and}$
23 $(\text{ }_{12} n = \text{'pel spacing' } \text{impl IsPelSpacingValue}^{7.17}(c) \text{ }_{12}) \text{ and}$
24 $(\text{ }_{13} n = \text{'pel transmission density' } \text{impl IsPelTransmissionDensityValue}^{7.15}(c) \text{ }_{13}) \text{ and}$
25 $(\text{ }_{14} n = \text{'spacing ratio' } \text{impl IsSpacingRatioValue}^{7.18}(c) \text{ }_{14}) \text{ and}$
26 $(\text{ }_{15} n = \text{'tile types' } \text{impl IsTileTypesValue}^{7.29}(c) \text{ }_{15}) \text{ and}$
27 $(\text{ }_{16} n = \text{'tiling offset' } \text{impl IsTilingOffsetValue}^{7.28}(c) \text{ }_{16}) \text{ and}$
28 $(\text{ }_{17} n = \text{'type of coding' } \text{impl IsRasterGraphicsContentTypeOfCodingValue}^{7.20}(c) \text{ }_{17}) \text{ }_0)$

Semiformal Description 7.2

Predicate “is a raster graphics coding specification”

A raster graphics coding specification is a nomination where each element is a raster graphics content coding attribute.

NOTE — This predicate is used in annex B.

Definition 7.2

- 1 $\forall v$
- 2 $(\circ \text{IsRasterGraphicsCodingSpecification}(v) \text{ iff}$
- 3 $(\text{IsNom}(v) \text{ and}$
- 4 $\forall b \in \sim v. (\text{IsRasterGraphicsContentCodingAttribute}^{7.9}(C\ b)) \text{)}_\circ$

Semiformal Description 7.3

Predicate “is a raster graphics presentation feature”

A raster graphics presentation feature is a nomination where each element is a raster graphics content presentation attribute.

NOTE — This predicate is used in annex B.

Definition 7.3

- 1 $\forall v$
- 2 $(\circ \text{IsRasterGraphicsPresentationFeature}(v) \text{ iff}$
- 3 $(\text{IsNom}(v) \text{ and}$
- 4 $\forall b \in \sim v. (\text{IsRasterGraphicsContentPresentationAttribute}^{7.8}(C\ b)) \text{)}_\circ$

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D.3 Interface to the Document Architecture

Semiformal Description 7.4

Predicate “satisfies raster graphics content architecture constraints”

A document profile *prof* and a document body *doby* satisfy the constraints imposed by the raster graphics content architecture if the following holds:

For all constituents for which the attribute 'content architecture class' is specified and has the value '2 8 2 7 2' (4), the content portion is a formatted processable raster graphics content portion (5).

For all constituents for which the attribute 'content architecture class' is specified and has the value '2 8 2 7 0' (6), the content portion is a formatted raster graphics content portion (7).

The value '2 8 2 7 2' appears in the document profile attribute 'content architecture classes' if and only if there exists a content portion for which the attribute 'content architecture class' has also this value (8, 9).

The value '2 8 2 7 0' appears in the document profile attribute 'content architecture classes' if and only if there exists a content portion for which the attribute 'content architecture class' has also this value (10, 11).

NOTE — This predicate is used in clause 7 of this part of ISO 8613.

Definition 7.4

- 1 $\forall prof, doby$
- 2 $(\circ \text{SatisfiesRasterGraphicsContentArchitectureConstraints}(prof, doby) \text{ iff}$
- 3 $\forall cont \in doby$
- 4 $(\text{ }_1(\text{ }_2 C \wedge cont \bullet \text{'content architecture class' = '2 8 2 7 2' impl}$
- 5 $\text{IsFormattedProcessableRasterGraphicsContent}^{7.5}(cont)_2) \text{ and}$
- 6 $(\text{ }_3 C \wedge cont \bullet \text{'content architecture class' = '2 8 2 7 0' impl}$
- 7 $\text{IsFormattedRasterGraphicsContent}^{7.6}(cont)_3)_1) \text{ and}$
- 8 $\text{'2 8 2 7 2' } \in C \wedge prof \bullet \text{'content architecture classes' iff}$
- 9 $\exists cont \in doby (C \wedge cont \bullet \text{'content architecture class' = '2 8 2 7 2'}) \text{ and}$
- 10 $\text{'2 8 2 7 0' } \in C \wedge prof \bullet \text{'content architecture classes' iff}$
- 11 $\exists cont \in doby (C \wedge cont \bullet \text{'content architecture class' = '2 8 2 7 0'}) \circ)$

Semiformal Description 7.5

Predicate "is formatted processable raster graphics content"

A formatted processable raster graphics content portion is a raster graphics content portion description. The attribute 'number of pels per line' is explicitly specified and the attribute 'number of discarded pels' is not specified.

Definition 7.5

- 1 $\forall cont$
- 2 $(\circ \text{IsFormattedProcessableRasterGraphicsContent}(cont) \text{ iff}$
- 3 $(\text{ }_1 \text{IsRasterGraphicsContentPortionDescription}^{7.7}(cont) \text{ and}$
- 4 $\text{not IsPlaceholder}^{1.19}(C \wedge cont \bullet \text{'number of pels per line'}) \text{ and}$
- 5 $\text{not 'number of discarded pels' } \in \text{NAMS}^{1.18}(cont)_1)_\circ)$

Semiformal Description 7.6

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Predicate "is formatted raster graphics content"

A formatted raster graphics content portion is a raster graphics content portion description. The attributes 'number of lines', 'number of lines per tile', 'number of pels per tile line', 'tile types' and 'tiling offset' are not specified.

Definition 7.6

- 1 $\forall cont$
- 2 $(\circ \text{IsFormattedRasterGraphicsContent}(cont) \text{ iff}$
- 3 $(\text{ }_1 \text{IsRasterGraphicsContentPortionDescription}^{7.7}(cont) \text{ and}$
- 4 $[\text{'number of lines'; 'number of lines per tile'; 'number of pels per tile line';$
- 5 $\text{'tile types'; 'tiling offset'}] \cap \text{NAMS}^{1.18}(cont) = [:]_1)_\circ)$

Semiformal Description 7.7

Predicate "is a raster graphics content portion description" (clause 7)

A raster graphics content portion description is a set of raster graphics content portion attributes, which are 'compression', 'content information', 'number of discarded pels', 'number of lines', 'number of lines per tile', 'number of pels per line', 'number of pels per tile line', 'tile types', 'tiling offset' and 'type of coding' (6–10). The attributes 'compression', 'content information', 'number of pels per line' and 'type of coding' must be present (4, 5). If the value of the attribute 'type of coding' is '2 8 3 7 5' (tiled encoding), the attributes 'number of lines per tile', 'number of pels per tile line', 'tile types' and 'tiling offset' must also be specified (11–13). If the attribute 'tiling offset' is specified, the first component of the value of this attribute must be less than the value of the attribute 'number of pels per tile line' and the last (second) component must be less than the value of the attribute 'number of lines per tile' (14–16).

NOTE — This predicate is used in clause 7 of this part of ISO 8613.

Definition 7.7

1 $\forall cont$
 2 $(\circ IsRasterGraphicsContentPortionDescription(cont) \underline{iff}$
 3 $(\circ IsRasterGraphicsContentPortionAttributeSet^{7.10}(cont) \underline{and}$
 4 $NAMS^{1.18}(cont) \supseteq ['compression'; 'content information';$
 5 $'number of pels per line'; 'type of coding'] \underline{and}$
 6 $NAMS^{1.18}(cont) \subseteq ['compression'; 'content information';$
 7 $'number of discarded pels'; 'number of lines';$
 8 $'number of lines per tile'; 'number of pels per line';$
 9 $'number of pels per tile line'; 'tile types';$
 10 $'tiling offset'; 'type of coding'] \underline{and}$
 11 $(\circ C \sim cont \cdot 'type of coding' = '2 8 3 7 5' \underline{impl}$
 12 $NAMS^{1.18}(cont) \supseteq$
 13 $['number of lines per tile'; 'number of pels per tile line'; 'tile types'; 'tiling offset']_2) \underline{and}$
 14 $(\circ 'tiling offset' \in NAMS^{1.18}(cont) \underline{impl}$
 15 $(\circ HEAD^{1.13}(C \sim cont \cdot 'tiling offset') < C \sim cont \cdot 'number of pels per tile line' \underline{and}$
 16 $LASTC^{1.14}(C \sim cont \cdot 'tiling offset') < C \sim cont \cdot 'number of lines per tile')_3)_1)_0)$

Semiformal Description 7.8

Predicate "is a raster graphics content presentation attribute" (clause 6)

A raster graphics content presentation attribute is one of the attributes 'clipping', 'image dimensions', 'initial offset', 'line progression', 'pel path', 'pel spacing', 'pel transmission density' or 'spacing ratio' with an appropriate value.

NOTE — This predicate is used in clause 7 of this part of ISO 8613.

Definition 7.8

1 $\forall att$
 2 $(\text{IsRasterGraphicsContentPresentationAttribute}(att) \text{ iff}$
 3 $\exists n, c$
 4 $(\text{att} = [n : c] \text{ and}$
 5 $n \in [\text{'clipping'}; \text{'image dimensions'};$
 6 $\text{'initial offset'}; \text{'line progression'};$
 7 $\text{'pel path'}; \text{'pel spacing'};$
 8 $\text{'pel transmission density'}; \text{'spacing ratio'}] \text{ and}$
 9 $(\text{ }_2 n = \text{'clipping'} \text{ impl}$
 10 $(\text{ }_3 \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsClippingValue}^{7.11}(c) \text{ }_3)_2) \text{ and}$
 11 $(\text{ }_4 n = \text{'image dimensions'} \text{ impl}$
 12 $(\text{ }_5 \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsImageDimensionsValue}^{7.16}(c) \text{ }_5)_4) \text{ and}$
 13 $(\text{ }_6 n = \text{'initial offset'} \text{ impl}$
 14 $(\text{ }_7 \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsRasterGraphicsInitialOffsetValue}^{7.14}(c) \text{ }_7)_6) \text{ and}$
 15 $(\text{ }_8 n = \text{'line progression'} \text{ impl}$
 16 $(\text{ }_9 \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsRasterGraphicsLineProgressionValue}^{7.12}(c) \text{ }_9)_8) \text{ and}$
 17 $(\text{ }_{10} n = \text{'pel path'} \text{ impl}$
 18 $(\text{ }_{11} \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsPelPathValue}^{7.13}(c) \text{ }_{11})_{10}) \text{ and}$
 19 $(\text{ }_{12} n = \text{'pel spacing'} \text{ impl}$
 20 $(\text{ }_{13} \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsPelSpacingValue}^{7.17}(c) \text{ }_{13})_{12}) \text{ and}$
 21 $(\text{ }_{14} n = \text{'pel transmission density'} \text{ impl}$
 22 $(\text{ }_{15} \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsPelTransmissionDensityValue}^{7.15}(c) \text{ }_{15})_{14}) \text{ and}$
 23 $(\text{ }_{16} n = \text{'spacing ratio'} \text{ impl}$
 24 $(\text{ }_{17} \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsSpacingRatioValue}^{7.18}(c) \text{ }_{17})_{16})_{16})_{10})$

Semiformal Description 7.9

Predicate “is a raster graphics content coding attribute” (clauses 7.1 and 7.2)

A raster graphics content coding attribute is one of the attributes 'compression', 'number of discarded pels', 'number of lines', 'number of lines per tile', 'number of pels per line', 'number of pels per tile line', 'tile types', 'tiling offset' and 'type of coding' with an appropriate value.

NOTE — This predicate is used in clause 7 of this part of ISO 8613.

Definition 7.9

1 $\forall att$
 2 ($\text{IsRasterGraphicsContentCodingAttribute}(att)$ iff
 3 $\exists n, c$
 4 ($att = [n : c]$ and
 5 $n \in$ ['compression'; 'number of discarded pels'; 'number of lines'; 'number of lines per tile';
 6 'number of pels per line'; 'number of pels per tile line'; 'tile types'; 'tiling offset';
 7 'type of coding']) and
 8 ($n =$ 'compression' impl
 9 ($\text{IsPlaceholder}^{1.19}(c)$ or $\text{IsCompressionValue}^{7.21}(c)$) and
 10 ($n =$ 'number of discarded pels' impl
 11 ($\text{IsPlaceholder}^{1.19}(c)$ or $\text{IsNumberOfDiscardedPelsValue}^{7.24}(c)$) and
 12 ($n =$ 'number of lines' impl $\text{IsNumberOfLinesValue}^{7.22}(c)$) and
 13 ($n =$ 'number of lines per tile' impl
 14 ($\text{IsPlaceholder}^{1.19}(c)$ or $\text{IsNumberOfLinesPerTileValue}^{7.26}(c)$) and
 15 ($n =$ 'number of pels per line' impl
 16 ($\text{IsPlaceholder}^{1.19}(c)$ or $\text{IsNumberOfPelsPerLineValue}^{7.23}(c)$) and
 17 ($n =$ 'number of pels per tile line' impl
 18 ($\text{IsPlaceholder}^{1.19}(c)$ or $\text{IsNumberOfPelsPerTileLineValue}^{7.27}(c)$) and
 19 ($n =$ 'tile types' impl
 20 ($\text{IsPlaceholder}^{1.19}(c)$ or $\text{IsTileTypesValue}^{7.29}(c)$) and
 21 ($n =$ 'tiling offset' impl
 22 ($\text{IsPlaceholder}^{1.19}(c)$ or $\text{IsTilingOffsetValue}^{7.28}(c)$) and
 23 ($n =$ 'type of coding' impl
 24 ($\text{IsPlaceholder}^{1.19}(c)$ or $\text{IsRasterGraphicsContent.TypeOfCodingValue}^{7.20}(c)$)

D.4 Attributes of the Raster Graphics Content Architecture

Semiformal Description 7.10

Predicate "is a raster graphics content portion attribute set"

A raster graphics content portion attribute set contains one or more of the attributes 'compression', 'content information', 'number of discarded pels', 'number of lines', 'number of lines per tile', 'number of pels per line', 'number of pels per tile line', 'tile types', 'tiling offset' and 'type of coding' with an appropriate value.

Definition 7.10

1 $\forall as$
 2 $(_0 \text{IsRasterGraphicsContentPortionAttributeSet}(as) \text{ iff}$
 3 $(_1 \text{IsNeNom}^{1.2}(as) \text{ and}$
 4 $\forall a \in \sim as.$
 5 $(_2 \text{N } a = \text{'compression' } \text{impl}$
 6 $(_4 \text{IsPlaceholder}^{1.19}(C a) \text{ or } \text{IsCompressionValue}^{7.21}(C a))_3) \text{ and}$
 7 $(_5 \text{N } a = \text{'content information' } \text{impl}$
 8 $(_6 \text{IsPlaceholder}^{1.19}(C a) \text{ or } \text{IsRasterGraphicsContentInformationValue}^{7.25}(C a))_5) \text{ and}$
 9 $(_7 \text{N } a = \text{'number of discarded pels' } \text{impl}$
 10 $(_8 \text{IsPlaceholder}^{1.19}(C a) \text{ or } \text{IsNumberOfDiscardedPelsValue}^{7.24}(C a))_7) \text{ and}$
 11 $(_9 \text{N } a = \text{'number of lines' } \text{impl } \text{IsNumberOfLinesValue}^{7.22}(C a))_9) \text{ and}$
 12 $(_{10} \text{N } a = \text{'number of lines per tile' } \text{impl}$
 13 $(_{11} \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsNumberOfLinesPerTileValue}^{7.26}(c))_{11})_{10} \text{ and}$
 14 $(_{12} \text{N } a = \text{'number of pels per line' } \text{impl}$
 15 $(_{13} \text{IsPlaceholder}^{1.19}(C a) \text{ or } \text{IsNumberOfPelsPerLineValue}^{7.23}(C a))_{13})_{12} \text{ and}$
 16 $(_{14} \text{N } a = \text{'number of pels per tile line' } \text{impl}$
 17 $(_{15} \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsNumberOfPelsPerTileLineValue}^{7.27}(c))_{15})_{14} \text{ and}$
 18 $(_{16} \text{N } a = \text{'tile types' } \text{impl}$
 19 $(_{17} \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsTileTypesValue}^{7.29}(c))_{17})_{16} \text{ and}$
 20 $(_{18} \text{N } a = \text{'tiling offset' } \text{impl}$
 21 $(_{19} \text{IsPlaceholder}^{1.19}(c) \text{ or } \text{IsTilingOffsetValue}^{7.28}(c))_{19})_{18} \text{ and}$
 22 $(_{20} \text{N } a = \text{'type of coding' } \text{impl}$
 23 $(_{21} \text{IsPlaceholder}^{1.19}(C a) \text{ or } \text{IsRasterGraphicsContentTypeOfCodingValue}^{7.20}(C a))_{21})_{20})_{21})_0)$

Semiformal Description 7.11

Predicate "is a clipping value" (clause 6.1.1)

The value of the attribute 'clipping' is a catenation of two elements where each element is a pair of non-negative integers.

Definition 7.11

1 $\forall v$
 2 $(_0 \text{IsClippingValue}(v) \text{ iff}$
 3 $\exists l, r$
 4 $(_1 v = [\rightarrow l \rightarrow r \rightarrow] \text{ and}$
 5 $\text{IsPairOfNnInt}^{1.8}(l) \text{ and } \text{IsPairOfNnInt}^{1.8}(r))_1)_0)$