CLAIMS

1. A method, performed by a computing device, of representing semantic definitions on the computing device, the method comprising:

receiving an input from a user;

editably displaying, according to the input, semantic definition statements, the semantic definition statements comprising:

semantic concept statements each comprising a semantic concept, a semantic concept operator, and at least one semantic element and/or free text description having a semantic concept relationship with the semantic concept; and

semantic context statements each comprising a first semantic context operator and at least two of the semantic concepts having a semantic context relationship with each other to define semantic relationships between the at least two of the semantic concepts;

saving the semantic definition statements in a metaset, the metaset being a dataset storing the semantic definition statements in a sentence form in which text and operators are arranged; and

storing the metaset in a memory storage device.

2. The method of claim 1, wherein the semantic concept operator comprises a general semantic concept operator, a hypernym operator, a hyponym operator, a holonym operator, a meronym operator, a troponym operator, or a free text operator.

3. The method of any of claims 1 or 2, wherein at least one of the semantic context statements further comprises a second semantic context operator for associating at least one semantic element and/or free text description with a semantic context relationship.

4. The method of any of claims 1-3, wherein the semantic definition statements further comprise semantic marker statements each comprising a semantic marker operator and a semantic marker describing one of the semantic concept relationships or one of the

semantic context relationships in more detail.

5. The method of claim 4, wherein the semantic definition statements further comprise semantic marker collection statements each comprising:

one of the semantic concepts;

a semantic marker collection operator; and

a group of the semantic markers, wherein each semantic marker of the group of semantic markers is found in at least one of the semantic marker statements comprising the one of the semantic concepts.

6. The method of any of claims 1-5, wherein the semantic definition statements further comprise semantic realm statements each comprising a semantic realm operator, a semantic realm, and:

at least one semantic element assigned to the semantic realm;

at least one semantic concept assigned to the semantic realm;

at least one semantic marker assigned to the semantic realm;

at least one other semantic realm assigned to the semantic realm; or

a semantic super-realm, wherein the semantic realm is assigned to the semantic super-realm.

7. The method of any of claims 1-6, wherein the semantic definition statements further comprise semantic inheritance statements each comprising a semantic inheritance operator and a semantic concept statement or a semantic context statement, wherein at least one semantic element or semantic concept inherits a semantic concept relationship or a semantic context relationship described by the semantic concept statement or the semantic context statement, wherein the semantic inheritance operator comprises an inheritance level indicator that indicates a level of semantic element or semantic concept inheriting the semantic concept relationship or the semantic context relationship and/or an inheritance direction indicator that indicates a direction of semantic element or semantic

concept inheriting the semantic concept relationship or the semantic context relationship.

8. The method of any of claims 1-7, wherein the semantic definition statements further comprise semantic instance statements each comprising a semantic element or a semantic concept, a semantic instance operator, and at least one semantic instance of the semantic element or the semantic concepts.

9. The method of any of claims 1-8, wherein the semantic definition statements further comprise lexical function statements comprising a semantic element or a semantic concept, a lexical function operator, and at least one of a synonym, an antonym, a singular form, a plural form, or a word form variation of the semantic element or the semantic concept.

10. The method of any of claims 1-9, wherein the semantic definition statements further comprise semantic internationalization statements each comprising a semantic element or a semantic concept, a semantic internationalization operator, and a translation of the semantic element or the semantic concepts into a different language and/or writing system.

11. A method, performed by a computing device, of semantically searching for a visual, comprising:

receiving input including text or an image via a computer interface;

deriving semantic expressions having semantic meaning from the input;

determining a type of semantic definition to apply to a search based on user input, the at least one type of semantic definition comprising:

semantic element definitions defining semantic elements comprising

visual or non-visual attributes;

semantic concept definitions defining semantic concept relationships between semantic concepts and semantic elements or other semantic concepts;

semantic context definitions defining semantic context relationships between semantic concepts;

semantic marker definitions further defining semantic concept relationships or semantic context relationships;

semantic realm definitions assigning semantic elements, semantic concepts, semantic markers, or semantic realms to a semantic realm;

semantic inheritance definitions, wherein a semantic element or a semantic concept inherits a semantic concept relationship or semantic context relationship from another semantic element or semantic concept;

semantic instance definitions further defining a semantic element or a semantic concept;

semantic internationalization definitions defining translations of semantic elements or semantic concepts into different languages and/or writing systems;

lexical function definitions defining synonyms, antonyms, singular forms, plural forms, and/or word form variations for semantic elements or semantic concepts; and/or

semantic reference definitions citing a reference for one or more semantic definitions;

receiving a choice of a user regarding a metaset, the metaset being a dataset storing semantic definition statements representing semantic definitions in a sentence form in which text and operators are arranged;

performing the search, wherein the search is for a semantic definition that matches the derived semantic expressions, the search being based on the derived semantic expressions, the determined type of semantic definition, and the chosen metaset, wherein performing the search comprises determining whether a visual including an image associated with a semantic definition has semantic relevance to the input; and

outputting a list of visuals determined to have semantic relevance to the input

based on the search.

12. The method of claim 11, wherein determining if a visual has semantic relevance to the input comprises:

determining that each of the semantic expressions matches a semantic definition associated with the visual;

determining that each of a specified subset of the semantic expressions matches a semantic definition associated with the visual; or

determining that any of the semantic expressions matches a semantic definition associated with the visual.

13. A method, performed by a computing device, of selecting semantic definitions from a metaset, comprising:

retrieving semantic definition statements representing semantic definitions from one or more metasets that are datasets storing semantic definition statements in a sentence form in which text and operators are arranged, wherein each of the semantic definition statements comprises a subject operand, an operator, and an object operand;

outputting a set of semantic expressions based on the semantic definition statements, wherein the set of semantic expressions comprise the subject operand or the object operand, and a selectable item corresponding to the subject operand or the object operand;

receiving a selection of the selectable item; and

determining semantic definitions corresponding to the set of semantic expressions and the selection.

14. A method of searching a metaset of semantic definition statements associated with visuals, the method being implemented by a computing device, the method comprising:

receiving search input via a computer interface;

deriving semantic expressions from the search input;

determining at least one type of semantic definition to apply to a search;

determining a metaset to apply to the search, the metaset comprising semantic definition statements representing semantic definitions;

performing the search based on the search input, the at least one type of semantic definition, and the metaset; and

outputting a list of visuals determined to have semantic relevance to the search input based on the search;

wherein the metaset is generated by:

receiving semantic definition statements as input, the semantic definition statements comprising:

semantic concept statements each comprising a semantic concept, a semantic concept operator of a set of semantic concept operators, and at least one semantic element or free text description having a semantic concept relationship with the semantic concept;

semantic context statements each defining a semantic context comprising a first semantic context operator and at least two of the semantic concepts having a semantic context relationship with each other; and

semantic inheritance statements each comprising:

a semantic inheritance operator comprising an inheritance level indicator or an inheritance direction indicator; and

a semantic inheritance operand comprising a semantic concept statement or a semantic context statement;

saving the received semantic definition statements in a metaset;

generating semantic definition statements through semantic inheritance using the

received semantic definition statements, the generating the semantic definition statements comprising, for each of the semantic inheritance statements:

determining, based on one or more operators of the semantic inheritance operand, a related portion of the semantic inheritance operand and an inheritance portion of the semantic inheritance operand;

searching the metaset for related semantic definition statements based on the inheritance level indicator or the inheritance direction indicator, and the related portion of the semantic inheritance operand; and

for each of the related semantic definition statements, generating semantic definition statements comprising a portion of the related semantic definition statement and the inheritance portion of the semantic inheritance operand;

saving the generated semantic definition statements in the metaset;

associating the generated semantic definition statements with visuals through a semantic visual processing, wherein visuals comprising visual semantic attributes are associated with semantically related statements of the generated semantic definitions statements having semantic relationships with the visual semantic attributes; and

storing the metaset in a memory storage device of a computing device.

15. A non-transitory computer readable medium storing instructions executable by a processor to perform the method of any of claims 1-14.