

## Graph-Theoretic Property: *atis* Indirectly Connected Components Set

(Graph-theoretic properties are those properties that are part of the meta-theory and have been abducted from graph theory to be used as a tool to provide solutions concerning the theory. Those solutions may be assigned as values to components or relations of the theory and thereby become part of the theory.)

**Indirectly-connected components set**,  ${}_{ID}e$ , =<sub>df</sub> a set of system components that have connections through other components.

$${}_{ID}e =_{df} \mathcal{X} = \{x \mid x \in \mathcal{R} \subset \mathcal{S}_0 \wedge \exists y \in \mathcal{R} (x \neq y \wedge (x,y)_{n>1} \wedge (x,y) \in {}_cE)\}$$

**Indirectly-connected components set** is a set of components,  $x$ ; such that, the components,  $x$ , are in a subset of the object-set, and there exist distinct components,  $y$ , of the subset such that the segment  $(x,y)$  has a segment cardinality greater than 1, and  $(x,y)$  is connected.

The following diagram depicts an *Indirectly-Connected Components Set*.

