Chapters of the Ontology

1. Historical introduction
2. Terminology
    1. Fundamentals
    2. "Concept" and "characteristic"
    3. Generic inheritance
    4. "object" and "property"
    5. Designation
3. "System" and "component"
    1. "System"
    2. "Component"
4. Current meaning of 'quantity'
5. "Property", "examinand", and "measurand"
    1. "Property"
    2. "Examinand"
    3. "Measurand"
6. "Kind-of-property" and conceptualization
    1. "Kind-of -property"
    2. Conceptualization
7. "Examination procedure", "examination method", and "examination principle"
    1. "Examination procedure"
    2. "Examination method"
    3. "Examination principle"
8. "Examination"
9. "Property value", "true property value", and "examined property value"
    1. "Property value"
    2. "True property value"
    3. "Examined property value"
10. "Property value scale"
11. General concept system of the main superordinate conceptsin Chapters 3 and 5 to 10, and expanded and explicatory definitions
    1. General concept system
    2. Expanded definitions
    3. Explicatory definitions
12. Generic concept system on property and quantity

    1. property
    2. quantity
13. Generic concept system on kind-of-property including kind-of-quantity
    1. kind-of-property
    2. kind-of-quantity
14. Generic concept system on examination procedure, measurement procedure, examination method, and examination principle
    1.
    2. measurement procedure
    3. examination method
    4. examination principle
15. Generic concept system on examination and measurement quantification
    1. examination
    2. measurement
    3. Quantification
16. Generic concept system on property value, quantity value, and allied concepts
    1. property value
    2. quantity value
    3. "Numerical value", "result", and "uncertainty"
17. Generic concept system on property value scale and quantity value scale
    1. property value scale
    2. quantity value scale
18. Mixed concept system on metrological unit and system of metrological units; the metrological unit "one" and SI units revisited
    1. metrological unit
    2. system of metrological units
    3. The metrological unit "one"
    4. SI units revisited
19. Mixed concept system on metrological dimension
20. "Dedicated kind-of-property" and systematic terms
    1. "Dedicated kind-of-property"
    2. Systematic terms for dedicated kinds-of-property
21. Generation of systematic terms for dedicated kinds-of-property according to the ENV 12264
22. Mathematical and logical representation of dedicated kind-of-property
    1. Mathematization

2. Mathematical relation according to Set Theory
3. Relation according to Object-Oriented Analysis
4. Function according to Theory of Sets
5. Function according to Object-Oriented Analysis
6. Operational definition in a measurement sense
7. Review of various representations of dedicated kind-of-property
8. Choice of formalism

23. Conclusions