

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY



SPECIAL COLLECTION
LIBRARY USE ONLY

FACULTY OF APPLIED SCIENCES

SEMANTIC
VAL OF CASE
MATERIAL

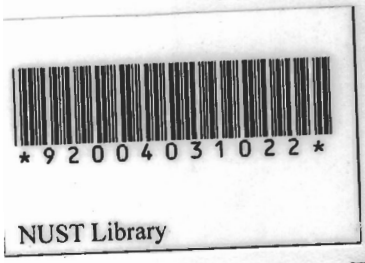
FOR
LEGAL

IMPLEMENTATION OF SEMANTIC STRATEGIES FOR DIRECTED RETRIEVAL OF CASE SPECIFIC LEGAL MATERIAL

LIBRARY NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY P.O. BOX 346 - BULAWAYO ZIMBABWE		
DATE	ACCESSION	CLASS No
	23101602SC1105	

by

SESEDZAI MUNYARADZI



JUNE 2011

ABSTRACT

This research builds a legal semantic search application model that directly retrieves case material on a web browser and highlights the exact parts of the case that a user is interested in. It uses semantic techniques derived from semantic strategies and the Jena API to achieve this. Semantics are given in RDF and these tell the computer exactly what a 'thing' is and how it is related to another, thus getting the computer to understand text. The application allows for the integration and organisation of authentic information a law office needs to work with, that information coming from the different sites and databases. A Supreme Court case of 2002, was chosen to model the application. Ontologies were drawn from the case, converted to RDF and represented in XML syntax. Each ontology was presented by its property type names. These properties are what facilitated the direct search processes. Jena was brought in to provide the necessary interface between Java and XML. It facilitated for the manipulation of RDF in Java code as it specified methods and properties for querying RDFs. It thus provided the required programming environment for RDF by allowing for the inclusion of additional classes and property definitions.