

Contents

	<u>page</u>
<u>Preface</u>	v
<u>Vorwort</u> (preface of the first edition as Regensburger Trichter 14 (1978))	VIII
<u>Chapter I</u> : Basic facts about symmetric bilinear forms, and definition of the Witttring.	
§ 1 Bilinear Spaces	1
§ 2 Witt- and Grothendieck-rings	10
Appendix: Quadratic Forms	17
<u>Chapter II</u> : The structure of Witttrings	
§ 1 Generators and Relations	19
§ 2 The prime ideals of a Witttring	23
§ 3 Nilpotent and torsion elements	30
§ 4 Application: The theorem of Artin-Pfister	32
§ 5 Complements to the structure theory	35
§ 6 Characterization of abstract Witttrings	42
§ 7 Fields with isomorphic Witttrings	47
<u>Chapter III</u> : Reduced Witttrings	
§ 1 Von Neumann regular rings	56
§ 2 Topological description of reduced Witttrings	64
§ 3 A Nullstellensatz for Witt ideals and a generali- zation of the theorem of Artin-Pfister	75
§ 4 When are Witttrings group rings?	78
§ 5 Fields with strong approximation for orderings	81
<u>References</u>	88
<u>Index</u>	93