Preface

“Contactless” radio frequency identification (RFID) is currently a flourishing subject area. Having worked in this field for many years, I felt the need to draw up a “progress report” on this subject. Hitherto, very little basic information or technical training in terms of applications and technology has been available to engineers, technicians and students. We trust that this book will at least partially remedy this deficiency.

The aim of this book is to provide, at a given date, the most comprehensive guide to the technologies and the various methods of applying them. This book is not intended to be encyclopedic, but it is a solid and thorough technical introduction to this subject. It is thorough in the sense that all the significant aspects of “contactless” applications (principles, theories, technology, components, conformity with standards, security, detailed examples of applications, etc.) are dealt with in detail.

Additionally, as an aid to learning, instead of placing all the theories and equations in a specific chapter and risking an information overload, I decided to distribute them through the text, as far as practicable, so that the reader would be able to see the overall picture at every point, covering theory, applications, implementation, technological and economic aspects, and so on.

This book is designed to introduce the reader to real implementations of “contactless” applications and it provides full details of all the complexities of system development.

As this field is developing so rapidly, I expect that I will have to take up my pen again (or rather return to the keyboard) in two or three years’ time to bring you the latest news, but I hope that this book will meet the needs of most users for the time being. In any case, it will ensure that solid foundations are laid while we await future developments.

I hope you enjoy this book – may your applications run smoothly!

IMPORTANT NOTE

Readers’ attention is drawn to the important fact that, in order to provide full coverage of the field of “contactless” technology, this book describes very many patented technical principles that are subject to licensing and associated rights (bit coding, modulation techniques, collision management devices, technical assemblies, etc.) and which have already been published in official professional texts and communications or at public conferences and seminars but whose use is strictly subject to current regulations.