

Contents

<i>Prologue</i>	xi
<i>Acknowledgements</i>	xiii
1 Bringing your technology to market	1
Introduction	1
The technology gap	1
2 So do you really have something of value?	5
The concept of intellectual property	5
Rights and duties	6
What are the various forms of IP?	6
Fundamental changes in the way we do science	8
Changes in university attitudes to IP	10
Patenting your technology: what is required for a patent to succeed?	12
Requirements for the grant of a patent	16
Handling the patent	19
Preparation of the patent application	25
Other issues that may be pertinent to your application	29
The use of trademarks in biotechnology	37
3 The first steps towards commercialisation of your technology	39
Decide what you want and know where you are going	39
The psychology of the commercial world	40
Interpersonal skills	42
Preparing for negotiations	42
Kneejerk negotiations	43
Focusing on the issues	44
Difficult negotiations and different games with different rules	51
The dangers of the bottom line approach	52
Professional advice: what you should expect	53
The role of the solicitor	53
The patent agent	54

viii	Contents
Accountants	55
Business development managers	55
Breaking down the communication barriers	56
Consultants and how to use them in the small business	57
4 The difficult problem of valuation of intellectual property	59
Basic commercial issues	59
The time value of money	60
Investment appraisal	62
The value of IP in the context of the business	63
Valuation principles – how to exploit your IP, when and with whom	65
The economics of royalty payments	67
Final considerations	69
5 Developing your ideas	71
Introduction	71
Consultancy and contract research	71
Technology transfer agreements	77
Industrial sponsorship	79
Allocation of company funds	79
The enterprise initiative	79
The CRAFT scheme	84
Exporting your products and services	85
Why export at all?	86
University technology transfer and industrial liason in academic institutions	88
The technology transfer process	90
6 The licensing option	91
Introduction	91
Why should you grant a licence?	91
Why should a licence be purchased?	92
What are the types of project that require a licence?	92
Initial negotiations and the non-disclosure agreement	93
Negotiating the licence	94
Pre-licensing negotiations and confidentiality	95
The informal letter	96
Heads of Agreement	96
The potential licensee	97
Project management	98
Defining the personnel	98

Contents	ix
The licence agreement	99
Types of licence	107
The effect of competition law upon your licence	109
7 Forming your own company	111
Trading places	111
Sources of company law	112
Setting up your company	112
Choosing a name	113
The memorandum and articles of association	114
Share capital	115
Disclosure, the annual returns and other issues	115
Accounting principles for your business: legal aspects	117
The directors report	118
What are your obligations as a director of your own company?	119
Shareholding as a director	122
Information for the Registrar of Companies	122
Individual responsibilities	123
Insurance for directors	123
The Institute of Directors	124
Other functionaries in the company	124
Taxation	125
Insurance for the business	126
The business plan	127
Forecasting the financial results	130
Revealing your confidential information	131
What form of finance should you ask for and how do you treat inflation?	132
Preparing the business plan	132
The contents of the business plan	134
Business plans for venture capital	145
The business plan for technology based businesses	146
8 Financing the business start up	148
Introduction	148
Use of working capital	150
Your aspirations and business objectives	150
Sources of finance for your business	150
Short-term finance	152
Longer-term funding	153
Why should an investment be made?	154
Cashing in or cashing out: exit routes for the investor	155
Financing expansion	158

x	Contents
The role of the company promoter	159
Venturing into share issues	160
Sources of risk finance	162
Creating value	174
9 Making your technology a commercial success	179
Where do you go from here?	179
Managing the company	179
Steering the company in the right direction	180
Company culture	181
Creation of the culture	182
Structure and management	186
Recruitment and selection	186
Selecting the team	190
Leadership	191
Employment and health and safety issues	192
Bookkeeping and credit control	194
Causes of failure	196
10 Conclusion	197
The biotechnology business environment	197
The UK bioscience industry: successful flotations	200
The management gap	201
The financing environment, societal regulation and intellectual property	202
The way forward	204
Appendices	
1 Business terminology	205
2 Useful addresses	209
3 Sources of marketing advice	216
4 Suggested reading	219
Index	220