

Cambridge University Press

978-1-107-05829-3 - The British Patent System During the Industrial
Revolution 1700–1852: From Privilege to Property

Sean Bottomley

Frontmatter

[More information](#)

THE BRITISH PATENT SYSTEM DURING
THE INDUSTRIAL REVOLUTION
1700–1852

Cambridge University Press
978-1-107-05829-3 - The British Patent System During the Industrial
Revolution 1700–1852: From Privilege to Property
Sean Bottomley
Frontmatter
[More information](#)

CAMBRIDGE INTELLECTUAL PROPERTY AND INFORMATION LAW

As its economic potential has rapidly expanded, intellectual property has become a subject of front-rank legal importance. *Cambridge Intellectual Property and Information Law* is a series of monograph studies of major current issues in intellectual property. Each volume contains a mix of international, European, comparative and national law, making this a highly significant series for practitioners, judges and academic researchers in many countries.

Series editors

Lionel Bently

Herchel Smith Professor of Intellectual Property Law,
University of Cambridge

William R. Cornish

Emeritus Herchel Smith Professor of Intellectual Property Law,
University of Cambridge

Advisory editors

François Dessemontet, Professor of Law,
University of Lausanne

Paul Goldstein, Professor of Law, Stanford University

The Rt Hon. Sir Robin Jacob, Hugh Laddie Professor of Intellectual Property,
University College, London

A list of books in the series can be found at the end of this volume.

Cambridge University Press

978-1-107-05829-3 - The British Patent System During the Industrial
Revolution 1700–1852: From Privilege to Property

Sean Bottomley

Frontmatter

[More information](#)

THE BRITISH PATENT
SYSTEM DURING THE
INDUSTRIAL REVOLUTION
1700–1852

From Privilege to Property

SEAN BOTTOMLEY



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press
978-1-107-05829-3 - The British Patent System During the Industrial
Revolution 1700–1852: From Privilege to Property
Sean Bottomley
Frontmatter
[More information](#)

CAMBRIDGE
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of
education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781107058293

© Sean Bottomley 2014

This publication is in copyright. Subject to statutory exception
and to the provisions of relevant collective licensing agreements,
no reproduction of any part may take place without the written
permission of Cambridge University Press.

First published 2014

Printed in the United Kingdom by Clays, St Ives plc

A catalogue record for this publication is available from the British Library

Library of Congress Cataloging in Publication Data
Bottomley, Sean, author.

The British patent system during the industrial revolution 1700–1852 : from privilege to
property / Sean Bottomley.

pages cm – (Cambridge intellectual property and information law ; 28)
ISBN 978-1-107-05829-3 (Hardback)

1. Patent laws and legislation–Great Britain–History. 2. Industrial revolution–Great
Britain–History. 3. Industrialization–Great Britain–History. I. Title.

KD1369.B68 2014

346.4104'8609033--dc23 2014021011

ISBN 978-1-107-05829-3 Hardback

Cambridge University Press has no responsibility for the persistence or accuracy of
URLs for external or third-party internet websites referred to in this publication,
and does not guarantee that any content on such websites is, or will remain,
accurate or appropriate.

CONTENTS

<i>List of tables and figures</i>	page vi
<i>Acknowledgements</i>	vii
<i>List of abbreviations</i>	viii
<i>Table of reported cases</i>	ix
1 Introduction	1
PART I The patent system	31
2 The administration of patents: a Poor Man’s tale?	33
3 The jurisprudence of patents: the specification requirement	75
4 Of patents and pirates: the adjudication of patent disputes	105
5 The substantive development of patent law	143
Conclusion to Part I	170
PART II Patents and technology	175
6 Patents and the Industrial Enlightenment	177
7 The market in patent rights	202
8 Patents and the Newcomen and Watt steam engines	231
9 Capital, patents and the joint-stock company	266
Conclusion to Part II	284
<i>Bibliography</i>	295
<i>Index</i>	316

TABLES AND FIGURES

1.1	English patents, 1660–1851	page 18	
2.1	Petitions before the law officers, 1838–47	56	
2.2	Patent fees, 1808 and 1846	74	
3.1	Patent case statistics, 1770–1849	82	
6.1	The publication of specifications, 1795–1850	191	
6.2	Walter Churchman’s pumping engine, c. 1733	192	
7.1	Plaintiff’s legal costs in <i>Crossley v. Beverley</i> , 1829	218	
7.2	The working history of litigated patents, 1770–1845	224	
8.1	Thomas Newcomen’s atmospheric engine, c. 1712	237	
9.1	Joint-stock companies fully registered to work patents, 1845–52	270	
9.2	Financial performance of the Electric Telegraph Company, 1847–54	274	
9.3	Provisionally and fully registered joint-stock companies, 1845–52	279	

Cambridge University Press
978-1-107-05829-3 - The British Patent System During the Industrial
Revolution 1700–1852: From Privilege to Property
Sean Bottomley
Frontmatter
[More information](#)

ACKNOWLEDGEMENTS

This book started life long ago as a PhD project at Cambridge, and from that time I owe an enormous debt to my two supervisors: Lionel Bently and Leigh Shaw-Taylor. The book was finished at the Institute for Advanced Study in Toulouse. My thanks goes to all those who made working there such a pleasure: Jonathan Klingler, Patrick Le Bihan, Alissa MacMillan, César Mantilla, Jordanna Matlon, Mohamed Saleh and Paul Seabright. I would also like to thank those who have been kind enough to provide feedback and comments on the manuscript at various stages of preparation: Bill Cornish, Zoë Crisp, James Dowey, Tomás Gómez-Arostegui, Ian Inkster and Alessandro Nuvolari.

Finally, I dedicate this book to my grandmother Maud, and to the memory of my grandfather Malcolm.

Cambridge University Press
978-1-107-05829-3 - The British Patent System During the Industrial
Revolution 1700–1852: From Privilege to Property
Sean Bottomley
Frontmatter
[More information](#)

ABBREVIATIONS

AER	<i>American Economic Review</i>
CPC	<i>Carpmael’s Patent Cases</i>
EHR	<i>Economic History Review</i>
ER	<i>English Reports</i>
ExEH	<i>Explorations in Economic History</i>
HC	House of Commons
HL	House of Lords
HPC	<i>Hayward’s Patent Cases</i>
JEH	<i>Journal of Economic History</i>
JLH	<i>Journal of Legal History</i>
LQR	<i>Law Quarterly Review</i>
NBER	National Bureau of Economic Research
ODNB	Oxford Dictionary of National Biography
P.P.	Parliamentary Papers
T&C	<i>Technology and Culture</i>
TNS	<i>Transactions of the Newcomen Society</i>
WPC	<i>Webster’s Patent Cases</i>

TABLE OF REPORTED CASES

In footnotes to the text, cases are cited by their HPC reference whenever this is available. Otherwise, the first reference listed below for a case will be the same one used in the footnotes. Details of other reports are given after the first reference.

Advocate-General v. Oswald (1848), 10 Dunlop 969
Allen v. Rawson (1845), 5 HPC 1, 135 ER 656
Arkwright v. Nightingale (1785), 1 HPC 221, 1 WPC 60, 1 CPC 38
Bainbridge v. Wrigley (1810), 1 HPC 549, 1 CPC 270
Baird v. Neilson (1842), 4 HPC 501, 8 ER 285
Baxter v. Combe (1850), 3 *The Irish Jurist* 27
Beard v. Egerton (1846), 5 HPC 217
Beaumont v. George (1815), 1 HPC 593, 1 CPC 294
Beeston v. Ford (1829), 2 HPC 9, 1 CPC 491
Berry's Patent (1850), 6 HPC 27, 13 ER 851
Birch v. Wood (1843), 4 HPC 651
Block v. McMichael (1847), 5 HPC 413
Bloxam v. Elsee (1825), 1 HPC 879, 171 ER 1316
Boulton & Watt v. Bull (1795), 1 HPC 369, 126 ER 651
Boulton & Watt v. Bull (1796), 1 HPC 395, 30 ER 937
Bovill v. Moore (1815), 1 HPC 613, 47 ER 1048
Bowman v. Taylor (1834), 2 HPC 359, 111 ER 108
Bramah v. Hardcastle (1789), 1 HPC 339, 1 CPC 168
Bridson v. Benecke (1849), 4 HPC 899
Brown v. Annandale (1842), 4 HPC 5, 1 WPC 433
Brown v. Brown (1840), 2 Dunlop 1356
Brown v. Kidston & Waters (1852), 6 HPC 401, 14 Dunlop 826
Brunton v. Hawkes (1821), 1 HPC 803, 106 ER 1034
Bulnois v. MacKenzie (1837), 3 HPC 25, 1 WPC 260
Carmichael v. Combe (1851), 6 HPC 213
Carpenter v. Smith (1841), 3 HPC 745, 1 WPC 530
Cartwright v. Eamer (1800), 1 HPC 415

X TABLE OF REPORTED CASES

- Chanter v. Leese* (1839), 3 HPC 269, 151 ER 296
Chollet v. Hoffman (1857), 7 HPC 405, 119 ER 1400
Collard v. Allison (1839), 3 HPC 351, 41 ER 188
Collinge v. Bowman (1834), 2 HPC 369, 1 CPC 660
Cornish v. Keene (1835), 2 HPC 481, 2 CPC 314, 1 WPC 497
Crane v. Price (1842), 4 HPC 85, 1 WPC 375
Crossley v. Beverley (1829), 2 HPC 13, 1 WPC 103
Crossley v. Derby Gas Co. (1834), 2 HPC 39, 1 WPC 119
Darcy v. Allen (1602), 1 HPC 1, 74 ER 1131
Derosne v. Fairie (1835), 2 HPC 589, 1 CPC 664, 1 WPC 154
Dollond v. Champneys (1766), 1 HPC 165, 1 CPC 28, 1 WPC 42
Donaldson v. Beckett (1774), *Hansard: The Parliamentary History of England from the earliest period to the year 1803* (London: Longman, 1813), col. 953
Edgeberry v. Stephens (1691), 1 HPC 117, 90 ER 1162
Electric Telegraph Co v. Nott (1847), 5 HPC 421, 47 ER 1040
Forsyth v. Manton (1816), 1 HPC 679
Forsyth v. Riviere (1819), 1 HPC 783, 1 CPC 401, 1 WPC 95
Gibson v. Brand (1841), 3 HPC 767, 1 WPC 626
Green's Patent (1857), 7 HPC 453
Hadden v. Pirie & Co. (1823), 2 Dunlop 423
Hancock v. Somervell (1851), 6 HPC 325
Harmar v. Playne (1807), 1 HPC 533, 33 ER 470
Harmar v. Playne (1809), 1 HPC 540, 103 ER 943
Haworth v. Hardcastle (1834), 2 HPC 373, 1 CPC 597
Hayne v. Maltby (1789), 1 HPC 345, 100 ER 665
Heath v. Unwin (1842), 4 HPC 199
Henson v. Alcock (1832), 2 HPC 183
Hesse v. Stevenson (1803), 1 HPC 455, 127 ER 305
Hill v. Thompson (1817), 1 HPC 717, 36 ER 239
Hill v. Thompson (1818), 1 HPC 754, 1 WPC 239
Hornblower v. Boulton & Watt (1799), 1 HPC 397, 101 ER 1285
Horton v. Maltby (1783), Mitford 129
Huddart v. Grimshaw (1803), 1 HPC 467, 1 DPC 265
Hurry v. The Oil Gas Company (1830), 3 *The Irish Law Recorder* 130
Jones v. Berger (1843), 4 HPC 687, 1 WPC 544
Jupe v. Pratt (1837), 3 HPC 39, 1 WPC 145, 2 CPC 289
Kay v. Marshall (1836), 2 HPC 861, 2 WPC 39
Lewis v. Marling (1829), 2 HPC 81, 1 WPC 490
Liardet v. Johnson (1778), 1 HPC, 1 CPC 35, 1 WPC 52
Liardet v. Johnson (1780), 1 HPC 202, 62 ER 1000
Losh v. Hague (1838), 3 HPC 125, 1 WPC 197

TABLE OF REPORTED CASES

Mackintosh v. Monteith (1800), 28 Morison 5
Manton v. Parker (1814), 1 HPC 571, 1 CPC 274
Marling v. Kirby (1841), 3 HPC 803
Millar v. Taylor (1769), 4 Burr 2303
Morgan v. Seaward (1836), 2 HPC 669, 1 WPC 187, 2 CPC 96
Morris v. Bransom (1776), 1 HPC 181, 1 CPC 30, 1 WPC 50
Neilson v. Baird (1843), 1 HPC 511, 6 Dunlop 51
Neilson v. Fothergill (1841), 4 HPC 385, 1 WPC 287
Neilson v. Harford (1841), 4 HPC 395, 1 WPC 295
Neilson v. Thompson (1841), 4 HPC 367, 1 WPC 273
Newton v. Grand Junction Railway Co. (1845), 5 HPC 301
Oldham v. Langmead (1789), 1 HPC 351
Universities of Oxford and Cambridge v. Richardson (1802), 1 HPC 427, 31 ER 1260
Perry v. Skinner (1837), 3 HPC 201, 1 WPC 250
Protheroe v. May (1839), 3 HPC 495, 1 CPC 531
Rex v. Arkwright (1785), 1 HPC 245, 1 WPC 64, 1 CPC 53
Rex v. Eley (1790), *The Times*, 9 December 1790 3
Rex v. Mill (1850), 6 HPC 117, 138 ER 153
Rex v. Wheeler (1819), 1 HPC 793, 106 ER 392
Ridgway v. Philip (1834), 2 HPC 477, 149 ER 1141
Roebuck v. Stirling (1774), 1 HPC 173, 1 WPC 45
Rubery v. Barrs (1843), 5 HPC 155
Russell v. Cowley (1834), 2 HPC 195, 1 WPC 463, 1 CPC 557
Russell v. Crichton (1839), 2 HPC 261
Russell v. Ledsam (1843), 2 HPC 269, 152 ER 964
Savory v. Price (1823), 1 HPC 857, 1 CPC 431
Smith v. Dickenson (1804), 1 HPC 523, 127 ER 339
Stead v. Williams (1843), 4 HPC 729, 2 WPC 123
Stevens v. Keating (1847), 2 Dunlop 423
Stirlings v. Black (1803), 28 Morison 4
Stocker v. Warner (1845), 5 HPC 207, 135 ER 493
Sullivan v. Redfield (1825), 1 Robb 477
Taylor v. Hare (1805), 1 HPC 529, 127 ER 461
Templeton v. MacFarlane (1848), 5 HPC 871, 10 Dunlop 796
Tennant’s Case (1802), 1 HPC 443, 1 CPC 177
Turner v. Winter (1787), 1 HPC 321, 1 WPC 77
Walker v. Congreve (1816), 1 HPC 703, 1 CPC 356
Watson v. Pears (1809), 1 HPC 545, 170 ER 1160
Whitchurch v. Hide (1742), 2 Atkyns 390
Woodcroft v. Reyner (1844), 4 HPC 1015