

WEARABLE COMPUTING: TECHNOLOGIES, APPLICATIONS AND GLOBAL MARKETS



IFT107A
February 2014

Adam Weigold
Project Analyst

ISBN: 1-56965-697-5

bcc | Research
Market Forecasting

BCC Research
49 Walnut Park, Building 2
Wellesley, MA 02481 USA
866-285-7215 (toll-free within the USA),
or (+1) 781-489-7301
www.bccresearch.com
information@bccresearch.com

TABLE OF CONTENTS

TOPIC	PAGE NO.
CHAPTER 1 INTRODUCTION	2
STUDY GOALS AND OBJECTIVES	3
REASONS FOR DOING THE STUDY	3
SCOPE OF REPORT	3
INTENDED AUDIENCE	4
METHODOLOGY AND INFORMATION SOURCES	4
ANALYST CREDENTIALS	5
RELATED BCC RESEARCH REPORTS	5
BCC RESEARCH WEBSITE	6
DISCLAIMER	6
CHAPTER 2 SUMMARY	8
KEY TAKEAWAYS	8
<i>SUMMARY TABLE GLOBAL WEARABLE COMPUTING FORECASTS FOR CONSUMER AND NON-CONSUMER MARKETS, THROUGH 2018 (\$ MILLIONS)</i>	9
<i>SUMMARY FIGURE GLOBAL FORECAST FOR WEARABLE COMPUTING MARKET REVENUES, 2012-2018 (\$ MILLIONS)</i>	9
CHAPTER 3 OVERVIEW	11
HISTORY OF WEARABLE COMPUTING INDUSTRY	12
THE IMPORTANCE OF WEARABLE COMPUTERS	13
CURRENT STATE OF WEARABLE COMPUTING INDUSTRY	14
PRODUCT LIFECYCLE	15
<i>FIGURE 1 PRODUCT LIFECYCLE FOR WEARABLE COMPUTING INDUSTRY</i>	15
TECHNOLOGY LIFECYCLE	16
<i>FIGURE 2 TECHNOLOGY LIFECYCLE FOR WEARABLE COMPUTING INDUSTRY (AREA UNDER CURVE REPRESENTS NUMBER OF CUSTOMERS)</i>	16
INDUSTRY DRIVERS	16
MARKET DRIVERS	17
TECHNOLOGY DRIVERS	18
WEARABLE COMPUTING PRODUCTS	20
<i>FIGURE 3 WEARABLE COMPUTING PRODUCT CATEGORIES</i>	21
<i>TABLE 1 WEARABLE COMPUTING PRODUCT CATEGORIES</i>	21
WEARABLE COMPUTING APPLICATIONS	22
<i>FIGURE 4 WEARABLE COMPUTING APPLICATIONS</i>	22
CONSUMER APPLICATIONS	23
<i>TABLE 2 CONSUMER MARKETS AND APPLICATIONS</i>	23
NON-CONSUMER APPLICATIONS	24
<i>TABLE 3 NON-CONSUMER MARKETS AND APPLICATIONS</i>	25
INDUSTRY CHALLENGES AND FUTURE DEVELOPMENTS	26
<i>FIGURE 5 CENTRAL CONTROL SMARTWATCH CONCEPT</i>	29
CHAPTER 4 WEARABLE COMPUTING PRODUCT CATEGORIES	31
PRODUCT SUMMARY MARKET OVERVIEW	31
PRODUCT MARKET FORECASTS	34

TOPIC	PAGE NO.
<i>TABLE 4 GLOBAL MARKET REVENUE FORECASTS BY PRODUCT CATEGORY THROUGH 2018 (\$ MILLIONS)</i>	34
<i>FIGURE 6 GLOBAL WEARABLE COMPUTING PRODUCT MARKET REVENUES 2012-2018 (\$ MILLIONS)</i>	34
<i>FIGURE 7 GLOBAL WEARABLE COMPUTING MARKET SHARES, BY PRODUCT CATEGORY, 2013 AND 2018 (%)</i>	36
SMARTWATCH MARKET	38
WORLDWIDE SMARTWATCH MARKET FORECASTS	39
<i>TABLE 5 GLOBAL FORECASTS FOR SMARTWATCH MARKET REVENUES THROUGH 2018</i>	39
<i>FIGURE 8 GLOBAL FORECAST FOR SMARTWATCH MARKET REVENUES 2012-2018 (\$ MILLIONS)</i>	39
APPLICATION TRENDS FOR SMARTWATCHES	40
FUTURE DEVELOPMENTS FOR SMARTWATCHES	41
<i>FIGURE 9 POTENTIAL FUTURE SMARTWATCH APPLICATIONS</i>	42
AUGMENTED REALITY EYEWEAR MARKET	43
WORLDWIDE AUGMENTED REALITY MARKET FORECASTS	45
<i>TABLE 6 GLOBAL FORECASTS FOR AR EYEWEAR MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)</i>	46
<i>FIGURE 10 GLOBAL FORECASTS FOR AUGMENTED REALITY EYEWEAR MARKET REVENUES, 2012-2018 (\$ MILLIONS)</i>	46
APPLICATION TRENDS FOR AUGMENTED REALITY EYEWEAR	46
<i>FIGURE 11 PRIMARY APPLICATIONS FOR SMART GLASSES COMPARED TO SMARTWATCHES AND SMARTPHONES</i>	48
FUTURE DEVELOPMENTS FOR AUGMENTED REALITY	49
VIRTUAL REALITY EYEWEAR MARKET	50
WORLDWIDE VIRTUAL REALITY MARKET FORECASTS	51
<i>TABLE 7 GLOBAL FORECASTS FOR VR EYEWEAR MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)</i>	52
<i>FIGURE 12 GLOBAL FORECASTS FOR VIRTUAL REALITY EYEWEAR MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)</i>	52
APPLICATION TRENDS FOR VIRTUAL REALITY EYEWEAR	52
FUTURE DEVELOPMENTS FOR VIRTUAL REALITY	53
SMART CLOTHING AND TEXTILES MARKET	53
WORLDWIDE SMART CLOTHING AND TEXTILES MARKET FORECASTS	54
<i>TABLE 8 GLOBAL FORECASTS FOR SMART CLOTHING AND TEXTILES MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)</i>	54
<i>FIGURE 13 GLOBAL FORECASTS FOR SMART CLOTHING AND TEXTILES MARKET REVENUES, 2012-2018 (\$ MILLIONS)</i>	54
APPLICATION TRENDS FOR SMART CLOTHING AND TEXTILES	55
FUTURE DEVELOPMENTS FOR SMART CLOTHING AND TEXTILES	56
ACTIVITY MONITORING DEVICE MARKET	56
WORLDWIDE ACTIVITY MONITORING DEVICE MARKET FORECASTS	57
<i>TABLE 9 GLOBAL FORECASTS FOR ACTIVITY MONITOR MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)</i>	57
<i>FIGURE 14 GLOBAL FORECASTS FOR ACTIVITY MONITORING MARKET REVENUES, 2010-2018 (\$ MILLIONS)</i>	58
APPLICATION TRENDS FOR ACTIVITY MONITORING	58
FUTURE DEVELOPMENTS FOR ACTIVITY MONITORING	59
WEARABLE CAMERA MARKET	59

TOPIC	PAGE NO.
WORLDWIDE WEARABLE CAMERA AND ACCESSORIES MARKET FORECASTS	60
<i>TABLE 10 GLOBAL FORECASTS FOR WEARABLE CAMERA MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)</i>	60
<i>FIGURE 15 GLOBAL FORECASTS FOR WEARABLE CAMERA MARKET REVENUES, 2012-2018 (\$ MILLIONS)</i>	60
APPLICATION TRENDS FOR WEARABLE CAMERAS	61
FUTURE DEVELOPMENTS FOR WEARABLE CAMERAS	61
HEALTHCARE AND SAFETY MONITORING DEVICE MARKET	62
WORLDWIDE HEALTHCARE AND SAFETY MONITORING MARKET FORECASTS	62
<i>TABLE 11 GLOBAL FORECASTS FOR HEALTHCARE AND SAFETY MONITOR MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)</i>	63
<i>FIGURE 16 GLOBAL FORECASTS FOR HEALTHCARE AND SAFETY MONITOR MARKET REVENUES, 2012-2018 (\$ MILLIONS)</i>	64
APPLICATION TRENDS FOR HEALTHCARE AND SAFETY MONITORING	64
FUTURE DEVELOPMENTS FOR HEALTHCARE AND SAFETY MONITORING	65
CHAPTER 5 WEARABLE COMPUTING APPLICATIONS	67
APPLICATION SUMMARY MARKET OVERVIEW	68
CONSUMER APPLICATIONS	68
WORLDWIDE CONSUMER APPLICATIONS MARKET FORECASTS	70
<i>TABLE 12 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR CONSUMER APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)</i>	70
<i>FIGURE 17 GLOBAL WEARABLE COMPUTING CONSUMER MARKET SHARE BY REGION, 2013 AND 2018 (%)</i>	70
<i>TABLE 13 GLOBAL WEARABLE COMPUTING CONSUMER MARKET REVENUES BY APPLICATION, THROUGH 2018 (\$ MILLIONS)</i>	71
<i>FIGURE 18 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR CONSUMER APPLICATIONS, THROUGH 2018 (\$ MILLIONS)</i>	72
<i>FIGURE 19 GLOBAL WEARABLE COMPUTING CONSUMER MARKET SHARE BY APPLICATION, 2013 AND 2018 (%)</i>	72
GENERAL CONSUMER APPLICATIONS	73
<i>TABLE 14 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR GENERAL CONSUMER APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)</i>	74
<i>FIGURE 20 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR GENERAL CONSUMER APPLICATIONS, 2012-2018 (\$ MILLIONS)</i>	74
<i>FIGURE 21 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR GENERAL CONSUMERS BY REGION, 2013 AND 2018 (%)</i>	74
FITNESS AND SPORTS APPLICATIONS	75
<i>TABLE 15 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR FITNESS AND SPORTS APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)</i>	76
<i>FIGURE 22 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR FITNESS AND SPORTS APPLICATIONS, THROUGH 2018 (\$ MILLIONS)</i>	76
<i>FIGURE 23 GLOBAL WEARABLE COMPUTING MARKET SHARES FOR FITNESS AND SPORTS BY REGION, 2013 AND 2018 (%)</i>	76
FASHION AND APPAREL APPLICATIONS	77
<i>TABLE 16 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR FASHION AND APPAREL APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)</i>	78
<i>FIGURE 24 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR FASHION AND APPAREL APPLICATIONS, 2012-2018 (\$ MILLIONS)</i>	78

TOPIC	PAGE NO.
<i>FIGURE 25 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR FASHION AND APPAREL BY REGION, 2013 AND 2018 (%)</i>	78
HOME AUTOMATION AND REMOTE ID APPLICATIONS	79
<i>TABLE 17 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR HOME AUTOMATION AND REMOTE ID BY REGION, THROUGH 2018 (\$ MILLIONS)</i>	83
<i>FIGURE 26 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR HOME AUTOMATION AND REMOTE ID, 2012-2018 (\$ MILLIONS)</i>	83
<i>FIGURE 27 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR HOME AUTOMATION AND REMOTE ID BY REGION, 2013 AND 2018 (%)</i>	84
GAMING AND RECREATION APPLICATIONS	85
<i>TABLE 18 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR GAMING AND RECREATION APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)</i>	85
<i>FIGURE 28 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR GAMING AND RECREATION APPLICATIONS, 2012-2018 (\$ MILLIONS)</i>	85
<i>FIGURE 29 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR GAMING AND RECREATION BY REGION, 2013 AND 2018 (%)</i>	86
NON-CONSUMER APPLICATIONS	87
WORLDWIDE NON-CONSUMER APPLICATIONS MARKET FORECASTS	88
<i>TABLE 19 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR NON-CONSUMER APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)</i>	89
<i>FIGURE 30 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR NON-CONSUMER APPLICATIONS BY REGION, 2013 AND 2018 (%)</i>	89
<i>TABLE 20 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR NON-CONSUMER APPLICATIONS BY USE, THROUGH 2018 (\$ MILLIONS)</i>	90
<i>FIGURE 31 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR NON-CONSUMER APPLICATIONS, 2012-2018 (\$ MILLIONS)</i>	91
<i>FIGURE 32 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR NON-CONSUMER APPLICATIONS BY APPLICATION, 2013 AND 2018 (%)</i>	91
HEALTHCARE APPLICATIONS	92
<i>TABLE 21 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR HEALTHCARE APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)</i>	92
<i>FIGURE 33 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR HEALTHCARE APPLICATIONS, 2013-2018 (\$ MILLIONS)</i>	93
<i>FIGURE 34 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR HEALTHCARE APPLICATIONS BY REGION, 2013 AND 2018 (%)</i>	93
DEFENSE AND SECURITY APPLICATIONS	94
<i>TABLE 22 GLOBAL WEARABLE COMPUTING MARKET FOR DEFENSE AND SECURITY BY REGION, THROUGH 2018 (\$ MILLIONS)</i>	94
<i>FIGURE 35 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR DEFENSE AND SECURITY APPLICATIONS, THROUGH 2018 (\$ MILLIONS)</i>	95
<i>FIGURE 36 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR DEFENSE AND SECURITY APPLICATIONS BY REGION, 2013 AND 2018 (%)</i>	95
INDUSTRIAL AND ENTERPRISE APPLICATIONS	96
<i>TABLE 23 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR ENTERPRISE AND INDUSTRIAL BY REGION, THROUGH 2018 (\$ MILLIONS)</i>	96
<i>FIGURE 37 GLOBAL WEARABLE COMPUTING MARKET FOR ENTERPRISE AND INDUSTRIAL APPLICATIONS, THROUGH 2018 (\$ MILLIONS)</i>	97
<i>FIGURE 38 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR ENTERPRISE AND INDUSTRIAL APPLICATIONS BY REGION, 2013 AND 2018 (%)</i>	97
CHAPTER 6 WEARABLE COMPUTING TECHNOLOGY	100

TOPIC	PAGE NO.
EVOLUTION OF COMPUTER TECHNOLOGY	100
<i>FIGURE 39 EVOLUTION OF COMPUTER TECHNOLOGY</i>	101
CURRENT STATE OF WEARABLE COMPUTING TECHNOLOGY	102
SMARTWATCH PATENT REVIEW	104
<i>FIGURE 40 APPLE AND GOOGLE SMARTWATCH PATENT DRAWINGS</i>	108
AUGMENTED REALITY PATENT REVIEW	108
<i>FIGURE 41 GOOGLE GLASS PATENT DRAWING WITH LASER PROJECTED USER CONTROL INTERFACE</i>	109
PATENT REVIEW OF OTHER WEARABLE TECHNOLOGIES	111
SUMMARY OF PATENT REVIEW	114
CHAPTER 7 INDUSTRY STRUCTURE AND COMPETITIVE ANALYSIS	116
<i>FIGURE 42 MARKET AND TECHNOLOGY DRIVERS AFFECTING THE WEARABLE COMPUTING INDUSTRY</i>	116
MARKET DRIVERS	117
TECHNOLOGY-BASED DRIVERS	118
IMPORTANT ISSUES FOR SUCCESS	121
INDUSTRY CYCLES	122
COMPETITIVE LANDSCAPE	123
CHAPTER 8 INTERNATIONAL ASPECTS	126
<i>TABLE 24 GLOBAL WEARABLE COMPUTING MARKET BY REGION, THROUGH 2018 (\$ MILLIONS)</i>	127
<i>FIGURE 43 GLOBAL WEARABLE COMPUTING MARKET SHARE BY REGION, 2013 AND 2018 (%)</i>	127
CHAPTER 9 COMPANY PROFILES	129
9SOLUTIONS LTD	129
ADIDAS AG	129
AIQ SMART CLOTHING INC.	130
ALIVECOR INC.	130
APPLE INC.	130
ASCENSION TECHNOLOGY CORPORATION	131
AVEGANT INC.	131
BAE SYSTEMS PLC	131
BIOSENSICS LLC	132
BODY MEDIA INC. (NOW JAWBONE INC.)	132
BODYTEL SCIENTIFIC INC.	132
BROTHER INDUSTRIES	133
BURTON CORPORATION	133
CANON INC.	133
CARL ZEISS INC	134
CASIO COMPUTER COMPANY LTD	134
CITIZEN HOLDINGS CO. LTD	135
CONNECTEDEVICE LTD	135
DUPONT	135
ELBIT SYSTEMS LTD	136
EPSON CORPORATION	136

TOPIC	PAGE NO.
EXMOVERE LLC.	137
FITBIT INC.	137
FITBUG HOLDINGS PLC	137
FITLINXX INC.	138
GARMIN LTD	138
GE HEALTHCARE	138
GLASSUP	139
GOOGLE INC.	139
GOPRO	139
HOT SMART WATCH, USA	140
IMMERSION	140
I'M SPA	140
INTERACTIVE WEAR AG	141
INTELLIGENT CLOTHING	141
JAWBONE INC.	141
KIMBERLY-CLARK	142
KOPIN CORPORATION	142
LG ELECTRONICS	143
MAPMYFITNESS INC.	143
MARTIAN WATCHES	144
MEDTRONIC INC.	144
META WATCH LTD	145
MICROSOFT	145
MICROVISION INC.	145
MILLIKEN & COMPANY	146
MISFIT	146
MOTOROLA MOBILITY (NOW GOOGLE)	146
NIKE INC.	147
NUUBO	147
OAKLEY INC.	147
OCULUS	148
OMRON	148
ORBITAL RESEARCH	149
ORYON TECHNOLOGIES LLC	149
OUTLAST TECHNOLOGIES	149
PANASONIC CORPORATION	150
POLAR ELECTRO	150
PEBBLE TECHNOLOGY INC.	150
PHILIPS HEALTHCARE	151
PHOSPHOR WATCHES	151
QUALCOMM	152
RECON INSTRUMENTS	152
RUNTASTIC GMBH	152
SAMSUNG ELECTRONICS	153
SCHOELLER TEXTILES AG	153
SIEMENS HEALTHCARE	154
SILICON MICRO DISPLAY INC.	154

TOPIC	PAGE NO.
SMARTLIFE TECHNOLOGY LTD	154
SONY CORPORATION	155
SPORTLINE	155
TASER	155
TIMEX CORPORATION	156
TORAY INDUSTRIES	156
UNDER ARMOUR INC.	156
VALVE CORPORATION	157
VIRTALIS LIMITED	157
VUSIX	158
WAHOO FITNESS	158
WITHINGS SAS	158
XMREALITY	159
ZEAL OPTICS INC.	159
ZEPHYR TECHNOLOGY CORPORATION	159

LIST OF TABLES

TABLE HEADING	PAGE NO.
SUMMARY TABLE GLOBAL WEARABLE COMPUTING FORECASTS FOR CONSUMER AND NON-CONSUMER MARKETS, THROUGH 2018 (\$ MILLIONS)	9
TABLE 1 WEARABLE COMPUTING PRODUCT CATEGORIES	21
TABLE 2 CONSUMER MARKETS AND APPLICATIONS	23
TABLE 3 NON-CONSUMER MARKETS AND APPLICATIONS	25
TABLE 4 GLOBAL MARKET REVENUE FORECASTS BY PRODUCT CATEGORY THROUGH 2018 (\$ MILLIONS)	34
TABLE 5 GLOBAL FORECASTS FOR SMARTWATCH MARKET REVENUES THROUGH 2018	39
TABLE 6 GLOBAL FORECASTS FOR AR EYEWEAR MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)	46
TABLE 7 GLOBAL FORECASTS FOR VR EYEWEAR MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)	52
TABLE 8 GLOBAL FORECASTS FOR SMART CLOTHING AND TEXTILES MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)	54
TABLE 9 GLOBAL FORECASTS FOR ACTIVITY MONITOR MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)	57
TABLE 10 GLOBAL FORECASTS FOR WEARABLE CAMERA MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)	60
TABLE 11 GLOBAL FORECASTS FOR HEALTHCARE AND SAFETY MONITOR MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)	63
TABLE 12 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR CONSUMER APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)	70
TABLE 13 GLOBAL WEARABLE COMPUTING CONSUMER MARKET REVENUES BY APPLICATION, THROUGH 2018 (\$ MILLIONS)	71
TABLE 14 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR GENERAL CONSUMER APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)	74
TABLE 15 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR FITNESS AND SPORTS APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)	76
TABLE 16 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR FASHION AND APPAREL APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)	78
TABLE 17 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR HOME AUTOMATION AND REMOTE ID BY REGION, THROUGH 2018 (\$ MILLIONS)	83
TABLE 18 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR GAMING AND RECREATION APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)	85
TABLE 19 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR NON-CONSUMER APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)	89
TABLE 20 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR NON-CONSUMER APPLICATIONS BY USE, THROUGH 2018 (\$ MILLIONS)	90
TABLE 21 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR HEALTHCARE APPLICATIONS BY REGION, THROUGH 2018 (\$ MILLIONS)	92
TABLE 22 GLOBAL WEARABLE COMPUTING MARKET FOR DEFENSE AND SECURITY BY REGION, THROUGH 2018 (\$ MILLIONS)	94
TABLE 23 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR ENTERPRISE AND INDUSTRIAL BY REGION, THROUGH 2018 (\$ MILLIONS)	96
TABLE 24 GLOBAL WEARABLE COMPUTING MARKET BY REGION, THROUGH 2018 (\$ MILLIONS)	127

LIST OF FIGURES

FIGURE TITLE	PAGE NO.
SUMMARY FIGURE GLOBAL FORECAST FOR WEARABLE COMPUTING MARKET REVENUES, 2012-2018 (\$ MILLIONS)	9
FIGURE 1 PRODUCT LIFECYCLE FOR WEARABLE COMPUTING INDUSTRY	15
FIGURE 2 TECHNOLOGY LIFECYCLE FOR WEARABLE COMPUTING INDUSTRY (AREA UNDER CURVE REPRESENTS NUMBER OF CUSTOMERS)	16
FIGURE 3 WEARABLE COMPUTING PRODUCT CATEGORIES	21
FIGURE 4 WEARABLE COMPUTING APPLICATIONS	22
FIGURE 5 CENTRAL CONTROL SMARTWATCH CONCEPT	29
FIGURE 6 GLOBAL WEARABLE COMPUTING PRODUCT MARKET REVENUES 2012-2018 (\$ MILLIONS)	34
FIGURE 7 GLOBAL WEARABLE COMPUTING MARKET SHARES, BY PRODUCT CATEGORY, 2013 AND 2018 (%)	36
FIGURE 8 GLOBAL FORECAST FOR SMARTWATCH MARKET REVENUES 2012-2018 (\$ MILLIONS)	39
FIGURE 9 POTENTIAL FUTURE SMARTWATCH APPLICATIONS	42
FIGURE 10 GLOBAL FORECASTS FOR AUGMENTED REALITY EYEWEAR MARKET REVENUES, 2012-2018 (\$ MILLIONS)	46
FIGURE 11 PRIMARY APPLICATIONS FOR SMART GLASSES COMPARED TO SMARTWATCHES AND SMARTPHONES	48
FIGURE 12 GLOBAL FORECASTS FOR VIRTUAL REALITY EYEWEAR MARKET REVENUES, THROUGH 2018 (\$ MILLIONS)	52
FIGURE 13 GLOBAL FORECASTS FOR SMART CLOTHING AND TEXTILES MARKET REVENUES, 2012-2018 (\$ MILLIONS)	54
FIGURE 14 GLOBAL FORECASTS FOR ACTIVITY MONITORING MARKET REVENUES, 2010-2018 (\$ MILLIONS)	58
FIGURE 15 GLOBAL FORECASTS FOR WEARABLE CAMERA MARKET REVENUES, 2012-2018 (\$ MILLIONS)	60
FIGURE 16 GLOBAL FORECASTS FOR HEALTHCARE AND SAFETY MONITOR MARKET REVENUES, 2012-2018 (\$ MILLIONS)	64
FIGURE 17 GLOBAL WEARABLE COMPUTING CONSUMER MARKET SHARE BY REGION, 2013 AND 2018 (%)	70
FIGURE 18 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR CONSUMER APPLICATIONS, THROUGH 2018 (\$ MILLIONS)	72
FIGURE 19 GLOBAL WEARABLE COMPUTING CONSUMER MARKET SHARE BY APPLICATION, 2013 AND 2018 (%)	72
FIGURE 20 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR GENERAL CONSUMER APPLICATIONS, 2012-2018 (\$ MILLIONS)	74
FIGURE 21 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR GENERAL CONSUMERS BY REGION, 2013 AND 2018 (%)	74
FIGURE 22 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR FITNESS AND SPORTS APPLICATIONS, THROUGH 2018 (\$ MILLIONS)	76
FIGURE 23 GLOBAL WEARABLE COMPUTING MARKET SHARES FOR FITNESS AND SPORTS BY REGION, 2013 AND 2018 (%)	76
FIGURE 24 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR FASHION AND APPAREL APPLICATIONS, 2012-2018 (\$ MILLIONS)	78
FIGURE 25 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR FASHION AND APPAREL BY REGION, 2013 AND 2018 (%)	78
FIGURE 26 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR HOME AUTOMATION AND REMOTE ID, 2012-2018 (\$ MILLIONS)	83
FIGURE 27 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR HOME AUTOMATION AND REMOTE ID BY REGION, 2013 AND 2018 (%)	84

FIGURE TITLE	PAGE NO.
FIGURE 28 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR GAMING AND RECREATION APPLICATIONS, 2012-2018 (\$ MILLIONS)	85
FIGURE 29 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR GAMING AND RECREATION BY REGION, 2013 AND 2018 (%)	86
FIGURE 30 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR NON-CONSUMER APPLICATIONS BY REGION, 2013 AND 2018 (%)	89
FIGURE 31 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR NON-CONSUMER APPLICATIONS, 2012-2018 (\$ MILLIONS)	91
FIGURE 32 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR NON-CONSUMER APPLICATIONS BY APPLICATION, 2013 AND 2018 (%)	91
FIGURE 33 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR HEALTHCARE APPLICATIONS, 2013-2018 (\$ MILLIONS)	93
FIGURE 34 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR HEALTHCARE APPLICATIONS BY REGION, 2013 AND 2018 (%)	93
FIGURE 35 GLOBAL WEARABLE COMPUTING MARKET REVENUES FOR DEFENSE AND SECURITY APPLICATIONS, THROUGH 2018 (\$ MILLIONS)	95
FIGURE 36 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR DEFENSE AND SECURITY APPLICATIONS BY REGION, 2013 AND 2018 (%)	95
FIGURE 37 GLOBAL WEARABLE COMPUTING MARKET FOR ENTERPRISE AND INDUSTRIAL APPLICATIONS, THROUGH 2018 (\$ MILLIONS)	97
FIGURE 38 GLOBAL WEARABLE COMPUTING MARKET SHARE FOR ENTERPRISE AND INDUSTRIAL APPLICATIONS BY REGION, 2013 AND 2018 (%)	97
FIGURE 39 EVOLUTION OF COMPUTER TECHNOLOGY	101
FIGURE 40 APPLE AND GOOGLE SMARTWATCH PATENT DRAWINGS	108
FIGURE 41 GOOGLE GLASS PATENT DRAWING WITH LASER PROJECTED USER CONTROL INTERFACE	109
FIGURE 42 MARKET AND TECHNOLOGY DRIVERS AFFECTING THE WEARABLE COMPUTING INDUSTRY	116
FIGURE 43 GLOBAL WEARABLE COMPUTING MARKET SHARE BY REGION, 2013 AND 2018 (%)	127