

318 Documents

| Publication numbers | Title | Current assignees |
|---------------------|--|--|
| DE102018113587 A1 | Faserprofile für hohe brandschutztechnische Anforderungen und Verfahren zu ihrer Herstellung | KOCH REINHARD |
| CN209742151U U | fiber reinforcement masonry structure | NORTH CHINA UNIVERSITY OF WATER CONSERVANCY AND ELECTRIC POWER |
| KR20190131994 A | Optical fiber-attached carbon fiber sheet using support fiber of flame grass type and construction method for the same | KOREA INSTITUTE OF CONSTRUCTION TECHNOLOGY |
| CN110331818 A | Fabric-reinforced ECC-tube-combining member and its making method src | CHINA UNIVERSITY OF MINING & TECHNOLOGY |
| CN110331821 A | FRP reinforced FRP square pipe spiral stirrup one fastener formula full coral aggregate concrete column of seawater | CHINA UNIVERSITY OF MINING & TECHNOLOGY |
| JP2019173274 A | Provided with the projection grid material FRP | NIPPON STEEL CHEMICAL & MATERIAL AGC MATEX |
| JP2019156669 A | Fiber reinforced composite material for concrete reinforcement, and concrete structure | KOMATSU MATERE |
| CN110173078 A | Intelligent composite material reinforcing rib for building field | ZHONGFU CARBON FIBER CORE CABLE TECHNOLOGY |
| CN110145071 A | Carbon fiber gridding and mortar interface bond stress reinforcing method and composite material | KABEN TECHNOLOGY |
| KR102009445 B1 | A method for seismic reinforcing of bricks wall | JUNG, DONG-JIN |
| CN110056125 A | Carbon-fiber-reinforced reinforced concrete beam | SHANGHAI UNIVERSITY |
| US20190224884 A1 | Production Of Pre-Stressed Concrete Structures Using Fibrous Reinforcing Tendons | ROCKWERK SYSTEMS |
| CN209099637U U | Large-diameter FRP rib end connecting structure | GUANGDONG UNIVERSITY OF TECHNOLOGY |
| CN109958230 A | Fiberglass reinforced plastic confined fiber lightweight aggregate concrete column and construction method thereof | CHANG'AN UNIVERSITY |
| KR101986840 B1 | Method for Reinforcing Earthquake-Resistant of Concrete Structure Using Fabric Sheet and Fabric Panel | CHANGHEUNG CONSTRUCTION |
| CN109838015 A | High-shearing-performance concrete shear wall provided with fiber reinforced composite material lattice bars | SOUTHEAST UNIVERSITY NANJING |
| CN109838036 A | FRP bellow-reinforcing composite bar | BEIJING UNIVERSITY OF TECHNOLOGY |
| CN109779089 A | Fiber rib reinforced masonry structure and construction method thereof | NORTH CHINA UNIVERSITY OF WATER CONSERVANCY AND ELECTRIC POWER |
| CN109779152 A | Annularly-arranged fiber reinforced composite material grid rib anti-punching structure | SOUTHEAST UNIVERSITY NANJING |
| CN208870285U U | FRP closed stirrup | NANJING FENGHUI COMPOSITE MATERIAL |
| US20190136389 A1 | Carbon fiber textile reinforcing member with anodic metal line | KOREA INSTITUTE OF CIVIL |

| Publication numbers | Title | Current assignees |
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| | and method of repairing and reinforcing concrete structure using the same | ENGINEERING & BUILDING TECHNOLOGY |
| RU2684271 C1 | Composite reinforcement bars | OBSHCHESTVO S OGRANICHENNOJ OTVETSTVENNOSTYU FAR IST KOMPOZIT |
| EP3470595 A1 | Bauelement für bauwerke | FSC TECHNOLOGIES |
| CN109594720 A | Composite structural component and application thereof | SHENZHEN ZHONGKE JINLANG INDUSTRY RESEARCH INSTITUTE |
| CN208685934U U | FRP makes up muscle and contains concrete member of this combination muscle | CHONGQING CONSTRUCTION SCIENCE RESEARCH INSTITUTE |
| CN109555271 A | High-performance deformation bamboo tendons and manufacturing technology thereof | XIANGTAN UNIVERSITY |
| CN208633385U U | Compound material net shear stirrup, compound material net skeleton, contain its beam column structure | CENTRAL RESEARCH INSTITUTE OF BUILDING & CONSTRUCTION CHINA JINGYE ENGINEERING |
| JP2008274667 A | Metal reinforcement bar and metal reinforcement bar forming device | KAZUHIDE ARIMOTO KANAGAWA PREFECTURE MIURA GUN NAKANO HAYAMA 8 4 5 3 |
| CN208578240U U | Self -resuming antidetonation concrete slab shell | JIANGSU DONGNAN STRUCTURE DISASTER PREVENTION ENGINEERING |
| CN208563759U U | Prefabricated assembled multitube hollow post of confined concrete double -walled and apparatus for producing | GUANGDONG UNIVERSITY OF TECHNOLOGY |
| CN208533735U U | Prestressed carbon fiber consolidates anticorrosive reinforcing apparatus of steel construction | NANCHANG UNIVERSITY |
| CN208472930U U | Concrete structure building that contains bamboo | LIU XIANGJIN |
| JP2019014651 A | Fiber-reinforced concrete | TODA |
| WO201921818 A1 | High strength fiber composite material cable | TOKYO ROPE MANUFACTURING KENSYU |
| JP2019010792 A | Mesh sheet laminate and concrete exfoliation prevention material | NIPPON ELECTRIC GLASS |
| JP2019000904 A | Laser processing method for carbon fiber-reinforced composite-laminated sheet, and laser-processed carbon fiber-reinforced composite-laminated sheet | TAKARA KOGEI |
| JP2018197570 A | Vibration control reinforcement structure, vibration control reinforcement method, material for structure, and vibration resistance reinforcement structure | TOKYO UNIVERSITY OF SCIENCE RHINO JAPAN |

| Publication numbers | Title | Current assignees |
|---------------------|--|---|
| KR20180127269 A | Seismic retrofit method for concrete boxes or tunnel structure using fiber panel | PARK, JONG MIN |
| KR20180127168 A | Seismic retrofit method for concrete pillar/column or slabs structure using fiber panel | PARK, JONG MIN |
| CN108824702 A | Connecting structure for ends of large-diameter FRP ribs, and connecting method and application thereof | GUANGDONG UNIVERSITY OF TECHNOLOGY |
| US20180326615 A1 | System and method for applying stress to a reinforcement member | MORTON BUILDINGS |
| CN108756051 A | Self-recovery anti-seismic concrete slab shell | JIANGSU DONGNAN STRUCTURE DISASTER PREVENTION ENGINEERING |
| EP3443176 A2 | Aus filamenten hergestelltes kabel, verfahren und vorrichtung zur herstellung solch eines kabels und zementverbundstoffstruktur mit dem kabel und besagte struktur | CSURGAI FERENC ATTILA SCURGAI FERENC ATILA |
| KR101912667 B1 | Seismic reinforcement method of concrete structure by using environmentally friendly and reinforcing member and earthquake-resistant mortar composition based on basalt fiber | CLMTECH |
| CN207934188U U | Roof beam embeds carbon fiber frame construction | SHENYANG JIANZHU UNIVERSITY |
| KR101902836 B1 | Concrete cross section repair and construction method using concrete-integrated and organic/inorganic hybrid waterproofing material stacked self-adhesive seal reinforcing and waterproofing sheet | CHEONG A SAM YANG ENGINEERING |
| KR101901856 B1 | Structural member using fiber panel | PARK, JONG MIN |
| CN108560828 A | Prefabricated multi-tube confined concrete double-wall hollow column, production device and technology | GUANGDONG UNIVERSITY OF TECHNOLOGY |
| CN108360751 A | Composite grid shear-resisting stirrup, concrete beam comprising same, and preparation process | CENTRAL RESEARCH INSTITUTE OF BUILDING & CONSTRUCTION CHINA JINGYE ENGINEERING |
| EP3006611 A1 | Strangstruktur und mehrstrangige struktur | KOMATSU MATERE |
| JP2016186209 A | Carbon fiber-reinforced plastic wire sheet and reinforcement method for steel structure | NAGAOKA UNIVERSITY OF TECHNOLOGY NIPPON STEEL CHEMICAL & MATERIAL |
| CN108331156 A | Bamboo-contained concrete structure building | LIU XIANGJIN |
| KR101878425 B1 | Seismic retrofit system using frp panel and construction method thereof | SEOUL METROPOLITAN DEVELOPMENT |
| KR101876549 B1 | Fiber reinforcement for repairing or reinforcing concrete structure and method for repairing or reinforcing concrete structure using the same | SESEUNG |
| KR101875077 B1 | Seismic retrofit system using fire-resistant panel and | KO DAE HYUN |

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| | construction method thereof | |
| KR20180071205 A | Pipe strength reinforcement with carbon material | BUWON PRECISION |
| RU-180464 U1 | Composite steel framework, prepared from steklorovinga and epoxy bonding agent | OBSHCHESTVO S OGRANICHENNOJ OTVETSTVENNOSTYU POLIKOMPOZIT |
| CN108118785 A | Frame structure with carbon fibers built in beam as well as manufacturing method and construction method thereof | SHENYANG JIANZHU UNIVERSITY |
| CN207419847U U | Bamboo timber arrangement of reinforcement concrete structure | NANJING FORESTRY UNIVERSITY |
| KR20180055363 A | Fiber Reinforced Polmer Panel For Seismic Reinforcing, And Seismic Reinforcing Using The Fiber Reinforced Polmer Panel And A Fiber Reinforced Concrete | GYEONGSANG NATIONAL UNIVERSITY INDUSTRY ACADEMIC COOPERATION FOUNDATION |
| EP3318689 A1 | Bewehrungsgitterelement, baukörper mit einem solchen bewehrungsgitterelement sowie verfahren zur herstellung eines bewehrungsgitterelements | SOLIDIAN |
| EP3312363 A1 | Leichte spannpresse | SORKIN FELIX SORKIN FELIX L |
| CN207211519U U | Fibre muscle sea water sea sand concrete roof beam | LIAONING UNIVERSITY OF TECHNOLOGY |
| EP3519646 A1 | Verstärkungselement zur erhöhung der festigkeit von selbstverfestigenden pastösen massen | NOVONOVON ZRT |
| CN207160420U U | Spiral fibre | XI AN JIAOTONG LIVERPOOL UNIVERSITY |
| US20190210921 A1 | Additive for cement composition and cement composition | NIPPON PAPER INDUSTRIES |
| RU-177233 U1 | Grid reinforcing polymeric-composite prestressed with the nanos-additive | PEPTID PRODUCTS |
| CN107587657 A | Bamboo material reinforced concrete structure | NANJING FORESTRY UNIVERSITY |
| CN206859515U U | Do you mix formula FRP compound muscle sea sand concrete roof beam of steel | GUANGDONG UNIVERSITY OF TECHNOLOGY |
| EP3480357 A1 | Kunstfaserkabel | TOKYO ROPE MANUFACTURING |
| JP2017227059 A | Junction structure | KOMATSU |
| DE102016211176 A1 | Verfahren und Verwendung einer Vorrichtung zur Durchführung des Verfahrens zur Herstellung von Betonbauteilen | LENZ TANKRED Lenz tank rate TANKRED LENZ |
| EP3260436 A1 | Armierter baustein aus gasbeton | EVONIK OPERATIONS |
| EP3472115 A1 | Schlichtezusammensetzung zur nassverwendung von geschnittenen glasfasern | OCV INTELLECTUAL CAPITAL |
| CN107489225 A | Fiber bar seawater and sea sand concrete beam and construction method thereof | LIAONING UNIVERSITY OF TECHNOLOGY |
| DE102016210040 A1 | Verfahren zum Herstellen eines zumindest bereichsweise | THYSSENKRUPP |

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| | profilieren, faserverstärkten Kunststoffprofils, ein profiliertes, faserverstärktes Kunststoffprofil und seine Verwendung | |
| CN107386535 A | Oval spiral fiber | XI AN JIAOTONG LIVERPOOL UNIVERSITY |
| JP2017206858 A | Repair panel | TAISEI SEIWA RENEWAL WORKS |
| CN107324704 A | Method for reinforcing concrete structure | CHENGDU RONGDE CONSTRUCTION LABOR |
| KR20170113784 A | Concrete pillar | POSCO |
| KR20170113031 A | Apparatus for manufacturing composite rebar for concrete | ANDONG NATIONAL UNIVERSITY |
| KR20170110806 A | Composite rebar for concrete and method for manufacturing the same | EXACT TRON |
| KR101784925 B1 | FRP Fire retardent seismic retrofit system using FRP panel and construction method thereof | THESOIL |
| KR101784335 B1 | Water vapour permeable epoxy resin for structural reinforcing materials and repair reinforcing and Seismic Retrofitting method of Concrete structures by using | ECOHITEC WOOAM CONSTRUCTION |
| CN107217786 A | Hybrid FRP (Fiber Reinforced Plastics)-steel composite bar sea sand concrete beam | GUANGDONG UNIVERSITY OF TECHNOLOGY |
| KR101777525 B1 | Repair and Reinforcement Method of Construction of Various Structures using Reinforced Fiber Panel and Fiber Laminated Panel | WON, JUNG CHUN |
| CN107100327 A | Concrete structure with carbon fiber cloth wrapped reinforcing steel bars and implementation method | FOSHAN UNIVERSITY |
| US20170241140 A1 | Reinforcing members for concrete structures | HONG KONG POLYTECHNIC UNIVERSITY |
| IN201741009106 A | Process of manufacturing fiber reinforced concrete using bamboo fibers as a strength enhancer | KAVITHA S |
| CN107023072 A | FRP-carbonized concrete prefabricated assembly combined system | BEIHANG UNIVERSITY OF AERONAUTICS & ASTRONAUTICS |
| KR101751699 B1 | Void slab having mesh member for improving shear strength and preventing light material from floating | ONEPC ENGINEERING |
| DE202018006269 U1 | Spiralfaser | XIAN JIAOTONG LIVERPOOL UNIVERSITY |
| US20170183871 A1 | Fiber ring reinforcement structures | HATTAR TANIN |
| EP3394336 A1 | Tridirektional verlegte gittergewebe zu verstärkungszwecken | SAINT GOBAIN ADFORS |
| CN106700241 A | Continuous-fiber-reinforced thermoplastic composite resin rib | QINGDAO JIWEI NEW MATERIAL TECHNOLOGY |
| KR101737557 B1 | Method of earthquake-proof reinforcement and flame-retardant composite reinforcement for concrete structure | DASAN KOREA INSTITUTE OF CERAMIC ENGINEERING & TECHNOLOGY KICET |
| KR101737554 B1 | Flame-retardant/semi-nonflammable earthquake-proof | KOREA INSTITUTE OF |

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| | reinforcement fiber composite for concrete structure and concrete reinforcement method using same | CERAMIC ENGINEERING & TECHNOLOGY KICET DASAN |
| EP3374576 A1 | Feuerfeste verbundmatte | BASF |
| CN206157893U U | Little expansion concrete component of spring fibre muscle | GUANGDONG RESEARCH INSTITUTE OF WATER RESOURCES & HYDROPOWER |
| DE102015220581 A1 | Zugelement aus faserverstärktem Kunststoff | TECHNISCHE UNIVERSITAET BERLIN |
| JP6108511 B1 | Sheet for reinforcement and reinforcement method using the sheet for reinforcement | SOZO GIJUTSU AKIO SAKAMOTO |
| RU2613998 C1 | Sprengel | ROGOZHIN OLEG GENNADEVICH |
| RU2612284 C1 | Composite reinforcement | FAR EASTERN FEDERAL UNIVERSITY |
| EP3344698 A1 | Additivpaket | WACKER CHEMIE |
| JP2017036519 A | Braid structure for reinforcement and composite material therewith | JAPAN WOOL TEXTILE GOSEN SHIMIZU CONSTRUCTION |
| DE112016003442 T5 | Verbundsystem und Verfahren zur Konsolidierung, insbesondere von Bauwerken aus bewehrtem Beton oder Mauerwerk, härtbare oder gehärtete Matrix und Textilverstärkungsgitter, die dieses System bilden | PAREXGROUP |
| CN106337497 A | Spring type fiber reinforced plastic micro-expanded concrete member | GUANGDONG RESEARCH INSTITUTE OF WATER RESOURCES & HYDROPOWER |
| KR20160149869 A | Concrete structure reinforcement method using composite pannel with key groove and structure of the same | KOREA REPAIR ENGINEERING |
| WO201803190 A1 | Method for producing prestressed concrete | GENERAL CORPORATE JUDICIAL PERSON KIHU |
| EP3318690 A1 | Kohlenstofffaserverstärkungspolymer und dessen jeweilige anwendungstechnik zur verstärkung von betonstrukturen | CLEVER REINFORCEMENT IBERICA MATERIAIS DE CONSTRUCAO UNIVERSITY DO MINHO |
| US20160361892 A1 | Foam sheathing reinforced with hybrid laminated fabric impregnated with vapor permeable air barrier material and method of making and using same | CIUPERCA ROMEO IIARIAN CIUPERCA ROMEO ILARIAN |
| DE102015210474 A1 | Gittermaststruktur sowie Verfahren zur Standfestigkeitserhöhung an eine Gittermaststruktur | INNOGY |
| KR101681520 B1 | Method and structure for reinforcement construction of concrete structure using carbon fiber sheet and reinforced member | JIN, YU DONG |
| US20190017283 A1 | Durable, fire resistant, energy absorbing and cost-effective | UNIVERSITY OF WEST |

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|---------------------|---|--|
| | strengthening systems for structural joints and members | VIRGINIA |
| KR101672303 B1 | Structure using stiffening member where stiffening member is installed in structure before generation of shear crack | GU, SEONG KYEONG |
| EP3091135 A1 | Bewehrungsstab, verfahren zur herstellung und verwendung | EVONIK DEGUSSA |
| KR101667530 B1 | Frp composition for reinforcing concrete structure by using composite material drawn and processed from basalt fiber, glass fiber, carbon fiber, and metal fiber by using high strength urethane resin, and method for repairing and reinforcing concrete structure by using same | CHEONGWON CHEMICAL |
| US20160265228 A1 | Basalt reinforcement for concrete containment cages | GLOBAL ENERGY SCIENCES |
| CN205558043U U | Combined type carbon -fibre composite reinforcing netting check | CARBON COMPOSITES |
| US20160258173 A1 | Structure reinforcement system and method | FORTRESS STABILIZATION SYSTEMS |
| CN205502393U U | Compound optic fibre intelligence muscle of embedded steel wire of wide range FRP | ZHIXING FIBER COMPOSITE REINFORCING NANTONG |
| KR101647957 B1 | Transverse bar for road facility | SUNG KWANG |
| US20190330849 A1 | Self-stressing shape memory alloy-fiber reinforced polymer patch | UNIVERSITY OF HOUSTON |
| EP3247841 A1 | Mittel zur verstärkung ineinandergreifender strukturelemente und modulares bauprodukt | JUST BIOFIBER STRUCTURAL SOLUTIONS |
| CN205259457U U | Novel compound FRP muscle | ZHENGZHOU UNIVERSITY |
| EP3224405 A1 | Anorganische bindemittelzusammensetzung umfassend oberflächenmodifizierten polyolefinfasern | CONSTRUCTION RESEARCH & TECHNOLOGY VENETO NANOTECH |
| CN105604237 A | Composite wallboard | CENTRAL SOUTH UNIVERSITY NATIONAL ENGINEERING LABORATORY FOR HIGH SPEED RAILWAY CONSTRUCTION |
| KR20160033854 A | Frp composite for blast, high-pressure, high-impact and seismic loading resistance of building structure and producing method thereof and construction method using the same | KYUNGPOOK NATIONAL UNIVERSITY INDUSTRY ACADEMIC COOPERATION FOUNDATION |
| CN105442758 A | Wide-range FRP (fiber reinforced plastic) embedded steel wire composite optical fiber smart rebar and preparation method thereof | ZHIXING FIBER COMPOSITE REINFORCING NANTONG |
| EP3040496 A1 | Strukturverstärkungssystem und -verfahren | FORTRESS STABILIZATION SYSTEMS |
| CN105401695 A | Novel composite FRP bar | ZHENGZHOU UNIVERSITY |
| EP3194682 A1 | Hohle zusammengesetzte bewehrungsstruktur, zugehörige herstellungsmethodologie und vorrichtung | COMPOSITE REBAR TECHNOLOGIES |

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|---------------------|---|---|
| KR20160028166 A | Repair/reinforcement structure for wood structure using frp bar and wood | KOREA NATIONAL UNIVERSITY OF TRANSPORTATION HANSOL HWD |
| EP3175058 A1 | Verfahren zum herstellen eines durch eine bewehrung vorgespannten betonwerkstücks und durch eine bewehrung vorgespanntes betonwerkstück | SYNROCKS |
| KR101584338 B1 | Automatic crack prevention capsule, manufacturing method thereof, and applying method thereof | LEE, YUN TAEK |
| US20170211254 A1 | Reinforced syntactic structure | ADVANTIC CORNERSTONE RESEARCH |
| US20070224418 A1 | Reinforced profile | TECHNOLOGY WOOD INTERNATIONAL |
| EP3150774 A1 | Ziegelsteinisolierungsverbundstoff und verfahren zur herstellung davon | LG HAUSYS |
| RU-156224 U1 | Steel framework is composition | Zinyakov Dmitriy Valerianovich (RU) |
| EP3091134 A1 | Konstruktionselement mit mehreren verbindungen und verfahren zur montage davon | KOMRAKOV EVGENY VYACHESLAVOVICH |
| KR101560804 B1 | Repair reinforcing and seismic retrofitting method for concrete structure by using fiber reinforced plastic [frp] rebar | WOOAM CONSTRUCTION |
| KR101547423 B1 | Fiber reinforcing material for concrete structure | GYEONGSANG NATIONAL UNIVERSITY INDUSTRY ACADEMIC COOPERATION FOUNDATION |
| EP3138824 A1 | Spannbeton für nebenstrukturelemente | HPC OKINAWA |
| EP3110624 A1 | Faserverstärkte beschichtete matten und mattenbedeckte platten sowie verfahren | GEORGIA PACIFIC GYPSUM |
| KR101541060 B1 | Hybrid fiber reinforcing bar and embedment-type reinforcing method for concrete structure using same | WHEE SOO CONSTRUCTION |
| KR101540243 B1 | Fiber reinforced sheet of concrete structure and method for reinforcing concrete structure using same | KUKJE CHEMICAL & CONSTRUCTION |
| US20150183170 A1 | Repair and strengthening of structures with electrically-cured resin-impregnated wrap | EHSANI MOHAMMAD R |
| US20150183169 A1 | Repair and strengthening of structures with heat-cured wrap | EHSANI MOHAMMAD R |
| US20150166744 A1 | Fiber reinforced material | PATWIN PLASTICS |
| KR101524998 B1 | Reinforcing method for concrete structure using carbon fiber reinforcing plate and anchoring reinforcing member | DREAM ENGINEERING |
| KR101524031 B1 | Reinforcing method of concrete structures improving stiffening force by anchoring carbon fibre sheets to the carbon fibre laminates on both sides | KIM, WON KI |
| EP3063341 A2 | Additive fertigung von gebäuden und anderen strukturen | BRANCH TECHNOLOGY |
| KR101508332 B1 | Fiber reinforcing panel with connection part | SR TECHNOLOGY |
| KR101502517 B1 | Fiber composite panel and strengthening method of concrete structure using the same thing | F R N D CONSTRUCTION DNSYS |

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|---------------------|--|---|
| KR101498998 B1 | Fiber composite panel for reinforcement of structure and reinforcement method of structure using of that | JINSUNGTECH |
| EP2842921 A1 | Neuartige Fasern, Verfahren zu ihrer Herstellung und Verwendung zur Herstellung von Verstärkungselementen | CONSTRUCTION RESEARCH & TECHNOLOGY |
| KR20140147403 A | Device to reinforce cross section of column or beam having two or more surfaces, and cross section reinforcing method using same | ARITEO HANJHO ENGINEERING |
| US20130273381 A1 | CO2 emission-free construction material made of CO2 | KUSE KOLJA |
| KR20140133740 A | Carbon fiber reinforced polymer stirrup | CHUNG ANG UNIVERSITY INDUSTRY ACADEMIC COOPERATION FOUNDATION |
| KR101454010 B1 | Hybrid panel for structure reinforcement | CFS CO., LTD. |
| CN203939180U U | Sea sand concrete flexural member | GUANGDONG UNIVERSITY OF TECHNOLOGY |
| US20140298656 A1 | Structure reinforcement partial shell | EHSANI MOHAMMAD R |
| CN104074313 A | High-strength continuous composite fiber mesh, production line and production method | NANJING LOYALTY COMPOSITE EQUIPMENT MANUFACTURE CENTRAL RESEARCH INSTITUTE OF BUILDING & CONSTRUCTION |
| EP2981658 A1 | Mauerwerkverstärkungsstruktur mit parallelen anordnungen von gruppierten metallfilamenten in einer parallelen position | BEKAERT |
| KR101435624 B1 | Performance reinforcing method of concrete structures for flexural, shear and seismic performances by using multi-directional carbon fiber laminates and mechanical anchor | WOOAM CONSTRUCTION |
| CN104032898 A | Three-dimensional fiber gird bar reinforced concrete structural part | NANJING UNIVERSITY OF TECHNOLOGY |
| EP2970001 A1 | Verstärkungsfasern in portland- und asphaltzementbeton | FORTA |
| EP2964437 A1 | Bambusverbundstoffmaterial für strukturelle anwendungen und verfahren zur herstellung davon | ETH SINGAPORE SEC EIDGENOSSISCHE TECHNISCHE HOCHSCHULE ETH ZURICH |
| DE102014203884 A1 | Befestigungsstruktur und Verfahren zum Herstellen derselben | HONDA MOTOR |
| US20160002927 A1 | Reinforced structural column system | UNIVERSITY OF CONNECTICUT |
| CN103899040 A | Fiber reinforce plastic (FRP) reinforced concrete-filled steel tube combination column | HARBIN ENGINEERING UNIVERSITY |
| KR101393082 B1 | Reinforcement method for increasing bending reinforcement (bending tensile) and shear load carrying capacity of concrete structure using multi-directional carbon fiber plate and anchoring bolt | KIM, WON KI |

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|---------------------|--|---|
| CN203769195U U | Carbon fiber clamping device | HENGSHUI BAOLI ENGINEERING RUBBER |
| CN103806673 A | Carbon fiber sheet stretching-drawing device for concrete column strengthening treatment | CHONGQING UNIVERSITY |
| KR101395202 B1 | Carbon fiber reinforcement, grid type fiber reinforcement, and method for reinforcing concrete structure using same | BOORIM INDUSTRIAL DEVELOPMENT |
| CN203514645U U | Composite material reinforcing steel bar | JIANGSU HONGYUAN GLASS FIBER REINFORCED PLASTIC |
| CN103498535 A | Anchoring method of flat cross section of carbon fiber composite reinforcement material | FASTEN |
| CN203429625U U | Carbon fiber bar high-shearing-resistance pipe pile | TIANJIN POLY CONCRETE PILE |
| KR101347038 B1 | Reinforcing method for concrete structures using fiber reinforcing materials | F R N D CONSTRUCTION CARECON |
| WO2014192073 A1 | Carbon fiber reinforcement bar and manufacturing process therefor, and continuous manufacturing apparatus and concrete structure | SE |
| US20130316118 A1 | Structural reinforcement, reinforced structural member and related method | UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION |
| KR101308513 B1 | Seismic reinforcement method with improved repairing and seismic performance for buildings and construction structures using a lattice fiber mesh and a fiber reinforced inorganic cement matrix for obtaining environmentally friendly and fireproof properties | WOOAM CONSTRUCTION DREAM ENGINEERING |
| CN103216041 A | Plane grid rib for structure reinforcement, mould and manufacturing method of plane grid rib | SOUTHEAST UNIVERSITY NANJING JIANGSU JCK NEW MATERIAL TECHNOLOGY JIANGSU GREEN MATERIALS VALLY NEW MATERIAL T & D |
| CN103225369 A | Fiber composite bar with surface having helicitic texture, and making method thereof | HARBIN INSTITUTE OF TECHNOLOGY |
| US20130216802 A1 | Composite wall panel with low thermal conductivity and sufficient strength for structural use | NANO & ADVANCED MATERIALS INSTITUTE |
| US20130183482 A1 | Fiber reinforced cellular pvc | PATWIN PLASTICS |
| DE102013100053 A1 | Beton-Fertigteilelement mit Textilbewehrung und Haltern | SOLIDIAN |
| KR101295029 B1 | Reverse construction method using a fiber rod, capable of constructing a wall of various shapes | LEE, YEON HWA |
| US20130097955 A1 | Precast concrete pile with carbon fiber reinforced grid | ALTUSGROUP |
| EP2912239 A1 | Armierungselement zur herstellung vorgespannter betonbauteile, betonbauteil und herstellverfahren | CPC |
| KR101223019 B1 | Composite panel capable of preventing a decline in quality and a repair and reinforcement method for a structure using | DONGGUK CONSTRUCTION |

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| | the same | |
| US20140224670 A1 | Anode, corrosion-protecting structure for concrete constructions using this, and corrosion protection method | FUJIMORI KOGYO SHO BOND |
| JP2013047446 A | Steel structure reinforcement method using carbon fiber material | NIPPON STEEL & SUMITOMO METAL NIPPON STEEL SUMIKIN MATERIALS |
| CN202809989U U | Reinforced plastic rod or pipe | JIANGSU XINTA JIYE CONSTRUCTION NEW TECHNOLOGY DEVELOPMENT |
| US20150113913 A1 | Hollow structure, and preparation method thereof | AJOU UNIVERSITY INDUSTRY COOPERATION FOUNDATION |
| CN202543982U U | Uplift pile with reinforcing plastic bars | JIANGSU XINTA JIYE CONSTRUCTION NEW TECHNOLOGY DEVELOPMENT |
| CN102644278 A | Prestress steel-plastic structure retaining cantilever pile with reinforced plastic stirrups | JIANGSU XINTA JIYE CONSTRUCTION NEW TECHNOLOGY DEVELOPMENT |
| JP2013223995 A | Method of manufacturing flat fiber reinforced plastic lattice shaped bar and flat fiber reinforced plastic lattice shaped bar | NIPPON STEEL SUMIKIN MATERIALS |
| JP2013011163 A | Tension member component and tension member using the same | KOMATSU |
| JP2013011162 A | Anchorage tool and reinforcement material using the same | KOMATSU |
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| DE102012101498 A1 | Bauelement und Verfahren zur Herstellung eines Bauelements | GROZ BECKERT |
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| EP2574705 A1 | Windturbinen-Turm | SIEMENS |
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| JP2013043816 A | Hardened cement paste reinforcing material | NIPPON STEEL SUMIKIN MATERIALS |
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| KR101218100 B1 | Spring for seismic reinforcement with tension and elasticity capable of maximally using existing columns and a manufacturing method thereof | DUKSUNG |
| KR101079318 B1 | Method for reinforcing the earthquake-resistant performance of a reinforced concrete structure including a brick wall using high-strength fiber boards which are attached to the brick wall in a diagonal direction | HEESANG RIENFORCE NOTE WOW REINFORCED |
| KR20120132752 A | Method for reinforcing surface of structure | Song, Ki - Yong |
| KR101056237 B1 | Constructing method of reinforce panel and reinforce structure of building wall by reinforce panel | PUSAN NATIONAL UNIVERSITY-ACADEMIC COOPERATION FOUNDATION |
| KR101102249 B1 | Method for repairing a reinforced concrete structure using anticorrosive mortar including fluorine-silicate and sodium-siliconate | JOIN THE NEW TECHNOLOGY BODUCK CONSTRUCTION |
| EP2686471 A1 | Rahmen für verstärkungselemente mit einer anorganischen matrix | MDB TEXINOV DELTAVAL |
| JP2012136814 A | String-like reinforced fiber composite | KOMATSU |
| KR101134993 B1 | Concrete structure with explosion-resistance and a manufacturing method thereof, capable of absorbing explosive energy and increasing intensity with respect to explosive load | KCC SAEKYUNG CONSTRUCTION |
| EP2489808 A1 | Bewehrungselement für die Aufnahme von Kräften in Betonelementen, die durch Stützelemente abgestützt sind | F J ASCHWANDEN |
| WO201286739 A1 | Fiber-reinforced flat plastic wire, process for producing same, and fiber-reinforced sheet | NIPPON STEEL MATERIALS |
| JP2012131875 A | Method for manufacturing fiber-reinforced flat plastic wire sheet, and fiber-reinforced flat plastic wire sheet | NIPPON STEEL SUMIKIN MATERIALS |
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| KR100973571 B1 | Method for repairing and reinforcing a concrete structure using a carbon rod, an anchor connecting member, a functional polymer mortar, and a corrosion blocking protection sheet | SAM JU |
| KR100982241 B1 | Repair and reinforcement method of a concrete column and a steel pipe, by using a reinforcing member made of fiber or polyvinyl chloride | CARECON KUKJE CHEMICAL & CONSTRUCTION MAINTENANCE MASTER |
| KR100973570 B1 | Concrete reinforcement method using a punched steel plate and a carbon bar | SAM JU |
| JP2011094247 A | Fiber-reinforced sheet and method for producing the same | NIPPON STEEL SUMIKIN MATERIALS |
| KR20110032921 A | High-strength reinforcing material for a concrete structure, comprising a resin structure and a reinforcing unit | KOREA C & G |
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| KR100925530 B1 | Fiber-steel plate composite panel for reinforcing a concrete structure and a manufacturing method thereof, and a concrete structure reinforcing method using the same, capable of preventing the corrosion of the steel plate | MAEIL CONSTRUCTION MAEIL DAUM ENGINEERING MAEIL ENGINEERING |
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| KR100952846 B1 | Fiber tape for reinforcing a concrete structure, to maximize tensile force | YOON,JEONGBAE |
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| KR100921447 B1 | Concrete structure repair and reinforcement method through the dispersion of tension | KUJ MIN INDUSTRY |
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| KR20100038717 A | Reinforcing method of structural body and reinforced structural body by double-faced complex FRP reinforce plate | UNIQUE TECHNOLOGY REINFORCEMENT MATERIALS SK CHEMICALS |
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| KR100861578 B1 | Frp re-bar for reinforcing a concrete structure and manufacturing method thereof, capable of improving the stableness of a structure by increasing adhesion with concrete and maintaining strength higher than steel reinforcing | SHIN, SUNG SOO SHIN, YOON JONG |
| KR20080059540 A | Composite fiber reinforcing panel including a safety belt, a manufacturing method thereof, and a concrete structure reinforcing method using the same for preventing the composite fiber reinforcing panel from cracking | EARTHPUAKE ENERGY FRICTION DAMPER TECHNOLOGY |
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| US20080134625 A1 | Apparatus and method for dispensing carbon fiber into concrete | OLDCASTLE PRECAST |
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| | concrete by fixing positioning spacers to main reinforcing bars and restraining the main reinforcing bars with fiber reinforced polymer bars and fixtures | |
| KR20090015667 A | Reinforcement method of a concrete structure capable of injecting an injection material between a concrete surface and a reinforcement material perfectly | SAFETY & QUALITY ENGINEERING |
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| EP2123701 A1 | Verfahren für die herstellung eines runden faserverstärkten kunststoffdrahts | NIPPON STEEL CHEMICAL & MAT |
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| WO2007145277 A1 | Method of fortifying toughness of reinforced concrete columnar structure with use of carbon fiber | NIPPON OIL |
| DE602007003117 D1 | Doppelt konische Verstärkungsfasern | GCP APPLIED TECHNOLOGIES WR GRACE |
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| US20050229532 A1 | Double-skin tubular structural members | HONG KONG POLYTECHNIC UNIVERSITY |
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| KR20050082339 A | Method of manufacturing the reinforcement materialsfor concrete building | LEE, SANG-KUN |
| US20080248302 A1 | Rod Member and Method for Producing the Same | RE FORM SYSTEM |
| EP1581461 A1 | Polymerbeton | UNIVERSITY OF SOUTHERN QUEENSLAND |
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| US20030167715 A1 | Method and apparatus for a composite concrete panel with transversely oriented carbon fiber reinforcement | OLDCASTLE PRECAST |
| US20030148681 A1 | Coating and method for strengthening a structure | SPORN ALAN R DEFENSTECH INTERNATIONAL |
| DE50210529 D1 | Verstärkungsvorrichtung | SIKA SCHWEIZ |
| JP2003225950 A | Fiber-reinforced plastics and device/method for manufacturing fiber-reinforced plastics | DEMON SADDLE HIROSHI FUKUOKA PREFECTURE SEONGNAM GU SEONGNAM GU FUKUOKA CITY 5 1 4 7 |
| EP1348711 A1 | Lumineszentes element und display | CANON |
| US20020110680 A1 | Structural reinforcement using composite strips | WISCONSIN ALUMNI RESEARCH FOUNDATION |
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| DE10126074 A1 | Belagskonstruktion fuer verkehrsflaechen und bauwerksoberflaechen | CLEVER REINFORCEMENT S & P CLEVER REINFORCEMENT |
| JP2002326285 A | Continuous fiber reinforced plastic rod material excellent in heat resistance | TORAY DU PONT |
| JP2002294903 A | Opening reinforcing structure of reinforced concrete- made plate member | MAEDA |
| JP2002285461 A | Fiber-reinforced sheet and method for reinforcement of structure | ABE NIKKO KOGYO TOHO EARTHTECH NIPPON STEEL MATERIALS TOYOBO |
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| EP1315857 A1 | Verstärkungsfasern für matrizenmaterial | WR GRACE |
| DE50004396 D1 | Kunststoffbauelement mit Einlegeteilen | 3A TECHNOLOGY & MANAGEMENT |
| DE50006243 D1 | Vorrichtung zum aufspalten der enden eines faserstrangs aus | SIKA SCHWEIZ |

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| DE60017070 D1 | Oberflächenbewehrung für Träger, Säulen, Platten o. d | IMMO EMERGO NAAMLOZE VENNOOTSCHAP ECC NAAMLOZE VENNOOTSCHAP |