Geneva, November 10, 2022

MSCI GLOBAL MICRO CAP INDEXES

The following are changes in constituents for the MSCI Global Micro Cap Indexes

which will take place as of the close of November 30, 2022.

SUMMARY PER COUNTRY:

Country	Nb of Securities Added	Nb of Securities Deleted
AUSTRALIA	27	15
BELGIUM	2	2
SWITZERLAND	2	3
DENMARK	2	0
SPAIN	2	2
FRANCE	11	3
GERMANY	9	4
NETHERLANDS	0	1
ITALY	4	1
JAPAN	21	10
HONG KONG	17	30
NORWAY	8	10
AUSTRIA	1	0
USA	116	88
CANADA	16	12
SWEDEN	19	4
UNITED KINGDOM	24	18
FINLAND	7	2
NEW ZEALAND	2	0
IRELAND	1	0
ISRAEL	6	17
SINGAPORE	2	4

MSCI AUSTRALIA INDEX

Additions

ALKANE RESOURCES APPEN ATTURRA AUSTRALIAN STRATEGIC

BETMAKERS TECH GROUP CHRYSOS CORPORATION CITY CHIC COLLECTIVE

DGL GROUP

DIATREME RESOURCES

DREADNOUGHT RESOURCES

EML PAYMENTS FAR EAST GOLD FIREFINCH GALILEO MINING GDI PROPERTY GROUP

ICOLLEGE IRIS METALS KOGAN.COM

LINDIAN RESOURCES PACT GROUP HOLDINGS LTD

PTB GROUP RED 5

SG FLEET GROUP

SOUTHERN CROSS MEDIA GRP

ST BARBARA TUAS GROUP

WESTGOLD RESOURCES

Deletions

AERIS ENVIRONMENTAL ALEXIUM INTERNATIONAL ARGOSY MINERALS

ARMOUR ENERGY BOART LONGYEAR CDI DW8

ELIXINOL WELLNESS

HILLS

JUNO MINERALS

KEYPATH EDUCATION CDI

MATSA RESOURCES

NUCHEV REGENEUS LTD TERRACOM

WHITE ENERGY CO

MSCI BELGIUM INDEX

Additions BNB BANQUE NATL BELGIQUE CARE PROPERTY INVEST

Deletions EXMAR OXURION

MSCI SWITZERLAND INDEX

Additions

MOLECULAR PARTNERS SCHWEIZERISCH NATL BANK Deletions

BASELLAND KANTONBK PART THURGAUER KANTONALBANK VARIA US PROPERTIES

MSCI DENMARK INDEX

Additions ENNOGIE SOLAR GROUP Deletions None

SP GROUP

MSCI SPAIN INDEX

Additions

AUDAX RENOVABLES

ENERSIDE ENERGY

Deletions

BIOTECHNOLOGY ASSETS

MEDCOM TECH

MSCI FRANCE INDEX

Additions ARAMIS GROUP

DELTA PLUS GROUP

ENTECH

GROUPE GUILLIN GROUPE OKWIND

LHYFE LNA SANTE

PIERRE & VACANCES SOLUTIONS 30 SE

VANTIVA

VISIOMED GROUP

Deletions LYSOGENE

MANUTAN INTERNATIONAL

NAVYA

MSCI GERMANY INDEX

Additions ADLER GROUP BIKE24 HOLDING ECOTEL COMMUNICATION FRIEDRICH VORWERK GROUP MEDIA AND GAMES INVEST

NORTHERN DATA OEKOWORLD

PSI AG GESELLSCHAFT

UMWELTBANK

Deletions AAP IMPLANTATE BIOXXMED ENAPTER FIRST SENSOR

Deletions

CORRE ENERGY

MSCI NETHERLANDS INDEX

Additions None

MSCI ITALY INDEX

Additions Deletions ENERGY BE

GENERALFINANCE

IMMOBILIARE GRANDE DISTR

PATTERN

MSCI JAPAN INDEX

Additions Deletions AB&COMPANY ADVENTURE

ACCRETE BUYSELL TECHNOLOGIES

HAKUTO CO ALMADO AMITA HOLDINGS J TRUST CO ANGES J-MAX CO BEWITH OKWAVE

OSAKA TITANIUM TECH CO CONEXIO CORP SHIN NIPPON BIO LAB EDP

FABRICA COMMUNICATIONS W SCOPE CORP INTLOOP WINGARC1ST KEIYO GAS CO

LA HOLDINGS
MEDPEER
MENTAL HEALTH TECH
MICROWAVE CHEMICAL
NIDEC OKK CORP
PLAID
PREMIUM WATER HOLDINGS
RENEWABLE JAPAN
SUNWELS
TSUBOTA LABORATORY

MSCI HONG KONG INDEX Additions ACME INTL HOLDINGS LTD AMTD IDEA GROUP A ADR ARTA TECHFIN CORP CA SALES HOLDINGS CANBRIDGE PHARMACEUTICAL CHINA MAPLE LEAF EDU(HK) CHINA WANTIAN HOLDINGS CT VISION SL(INTL) HLDGS HONG KONG AEROSPACE(HK) MIN XIN HOLDINGS(HK) PINE CARE GROUP PRENETICS GLOBAL REGAL REIT SEEC MEDIA GROUP (HK) SILVER TIDE HOLDINGS TELECOM SERVICE ONE HLDG TROOPS (HK)

AMCO UNITED HOLDING BOSA TECHNOLOGY HLDGS BRONCUS HOLDING C BANNER INTL HLDGS CHI HO DEVELOPMENT HLDGS CHINA ASIA VALLEY GROUP CHINA E WALLET PAYMENT CHINA ENV ENERGY INV COURAGE INVEST GRP (HK) GREATER BAY AREA DYNAMIC HILONG HOLDING (HK) HK ASIA HOLDINGS KINETIX SYSTEMS KINGKEY FINANCIAL INTL LIIMINA GROUP MOISELLE INTERNATIONAL ORIENT VICTORY SMART PINE TECHNOLOGY HLDGS SHENG YUAN HOLDINGS SOLARGIGA ENERGY (HK) STYLAND HOLDINGS SUPERACTIVE GROUP CO. SUPERROBOTICS HOLDINGS TAI UNITED HOLDINGS TIMES UNIVERSAL GROUP TOWN HEALTH INTL MED GRP TRANSMIT ENTERTAINMENT WAC HOLDINGS WWPKG HOLDINGS YEAH YEAH GROUP HLDGS

Deletions

MSCI NORWAY INDEX
Additions
ECIT B
EVERFUEL
LINK MOBILITY GROUP
MASOVAL
MEDISTIM
OCEAN GEOLOOP
PGS

SELVAAG BOLIG

COOL COMPANY
ICE FISH FARM
ICELANDIC SALMON
NORSKE SKOG
ODFJELL A
ODFJELL B
PCI BIOTECH
SPAREBANKEN SOR

AVANCE GAS HOLDING

MSCI AUSTRIA INDEX Additions FACC

Deletions None

Deletions

CADELER

MSCI USA INDEX
Additions
374WATER INC
4D MOLECULAR
ACCELERATE DIAGNOSTICS
AEYE A
ALAUNOS THERAPEUTICS
ALZAMEND NEURO
AMERICAN PUBLIC EDU
ANNEXON

Deletions
ADMA BIOLOGICS
AEHR TEST SYSTEMS
AEROVATE THERAPEUTICS
AKERNA CORP
AKOUOS
AKOYA BIOSCIENCES
ALLIED MOTION TECH
ALTIMMUNE

APPHARVEST

APPLIED BLOCKCHAIN

ARDELYX

ASCENT SOLAR TECH ASTRA SPACE A AURA BIOSCIENCES AVAYA HOLDINGS

AVEANNA HEALTHCARE HLDGS

BENEFITFOCUS

BIRD GLOBAL A

BLADE AIR MOBILITY A BLUE BIRD (US) BRIGHT GREEN

BRILLIANT EARTH GRP A

CANTALOHDE CHIMERIX

CIPHER MINING

CITIZENS FINANCIAL SVCS

CONTANGO ORE CORE SCIENTIFIC

CURO GROUP HOLDINGS CORP

DAKOTA GOLD

DANIMER SCIENTIFIC INC A

DERMTECH

DIEBOLD NIXDORF

DIVERSIFIED HEALTHCARE

DOMA HOLDINGS DULUTH HOLDINGS B ECR BANCORP

EMBARK TECHNOLOGY A EMPIRE PETROLEUM CORP

EVERQUOTE A FARADAY A FAZE HOLDINGS FINGERMOTION

FIVE POINT HOLDINGS A FRANKLIN STREET PPTYS

FTAI INFRASTRUCTURE GAMIDA CELL(US)

GANNETT CO

GLATFELTER

GLOBAL BUSINESS TRAVEL A

GROUPON

GROWGENERATION CORP

HANOVER BANCORP

HOWNANIAN ENTERPRISES A HYDROFARM HOLDINGS

TDEANOMICS INSEEGO CORP

JOHN MARSHALL BANCORP

JOINT (THE) LATCH LL FLOORING LOCAL BOUNTI

LULU'S FASH LNGE HLDG

MACROGENICS MAGYAR BANCORP MCEWEN MINING MOONLAKE IMMUNO MULLEN AUTOMOTIVE

NEOVOLTA

NEXPOINT DIV REIT OFFERPAD SOLUTIONS A OPAL FUELS A

OPORTUN FINANCIAL OUSTER

PARTY CITY HOLDCO

PATHFINDER BANCORP PEAR THERAPEUTICS A

PEDEVCO PEPGEN PETIQ A PLBY GROUP PORCH GROUP A QUOTIENT TECHNOLOGY ARCADIA BIOSCIENCES ARTESIAN RESOURCES A AVEO PHARMACEUTICALS

AVINGER AXOGEN BAUDAX BIO

BELLICUM PHARMACEUTICALS

BLUEBIRD BIO

BRIDGEWATER BANCSHARES BUSINESS FIRST BANCSHS

CALYXT

CAMBRIDGE BANCORP CHEMBIO DIAGNOSTICS COASTAL FINANCIAL

COHBAR

CONTRAFECT CORP

COVENANT LOGISTICS GRP A

CTI BIOPHARMA CORP

CYREN US

DISTRIBUTION SOLN GRP EDGEWISE THERAPEUTICS ENTRADA THERAPEUTICS EOUITY BANCSHARES ESPERION THERAPEUTICS ESPORTS ENTERTAINMENT

EVOKE PHARMA EXICURE EZCORP

FARMERS NATL BANC CORP FIVE STAR BANCORP FLUENCE ENERGY A FRESH TRACKS THERAPEII G1 THERAPEUTICS GREENE COUNTY BANCORP GUILD HOLDINGS CO A HAYNES INTERNATIONAL HBT FINANCIAL

HELIUS MEDICAL A (US)

HISTOGEN

IMPAC MORTGAGE HOLDINGS

TNOTTV

JANUX THERAPEUTICS JOBY AVIATION KURA SUSHI USA A LOGICMARK

METROCITY BANKSHARES MID PENN BANCORP MIND TECHNOLOGY MOTORSPORT GAMES A MOTUS GI HOLDINGS NABRIVA THERAPEUTICS NAVIDEA BIOPHARMA

NKARTA NUVALENT A MIZEE OTONOMY

PHASEBIO PHARMACEUTICALS PLIANT THERAPEUTICS

POLARITYTE

RICEBRAN TECHNOLOGIES RILEY EXPLORATION SCOPUS BIOPHARMA SENECA FOODS CORP A SMARTFINANCIAL

SOUTH PLAINS FINANCIAL STH MISSOURI BANCORP SUMMIT THERAPEUTICS (US)

TARSUS PHARMA TETRA TECHNOLOGIES

TRANSCAT

UFP TECHNOLOGIES UNICO AMERICAN CORP UNIQUE FABRICATING UNIVERSAL LOGIS HLDGS

VERTEX ENERGY

RAIN THERAPEUTICS REALREAL (THE) RELMADA THERAPEUTICS RIGEL PHARMACEUTICALS RIGETTI COMPUTING RITE AID CORP RUSH STREET INTERACT A SELECTOUOTE SENTI BIOSCIENCES SMITH-MIDLAND CORP SONO-TEK CORP STARRY GROUP HOLDINGS A TACTILE SYSTEMS TECH THREDUP A TRITECAR UNIVERSAL ELECTRONICS UPLAND SOFTWARE UROGEN PHARMA(US) VAXART VBI VACCINES (US) VELODYNE LIDAR VERICITY VERITONE VINCO VENTURES VINTAGE WINE ESTATES VOLTA A

WAG! GROUP

WILLDAN GROUP WM TECHNOLOGY A

WEBER A

ZIMVIE

WEAVE COMMUNICATIONS

WHEELS UP EXPERIENCE A

VITA COCO VSE CORP WINDTREE THERAPEUTICS XPONENTIAL FITNESS A ZOVIO

MSCI CANADA INDEX Additions AIRBOSS OF AMERICA CORP ARGONAUT GOLD BITFARMS (CA) CANACOL ENERGY CATHEDRAL ENERGY SVCS COPPER MOUNTAIN MINING ENTHUSIAST GAMING HLDGS H2O INNOVATION (CA) HLS THERAPEUTICS MARATHON GOLD CORP MIND MEDICINE PYROGENESIS CANADA REAL BROKERAGE (THE)(CA) REAL MATTERS SERNOVA CORP (CA) SIR ROYALTY INCOME FUND

MSCI SWEDEN INDEX

Deletions
AEGIS BRANDS
ALGOMA CENTRAL CORP
AUTOMOTIVE PROP REIT
BBTV HOLDINGS SV
CES ENERGY SOLN CORP
GLOBAL ATOMIC CORP
HALO COLLECTIVE
HEMPFUSION WELLNESS
KIWETINOHK ENERGY
MINCO SILVER CORP
SHAWCOR A
TRILOGY INTL PARTNERS

Additions 4C GROUP ALLIGO B BHG GROUP BICO GROUP B BONAVA B FASADGRUPPEN GROUP FASTIGHETS AB TRIANON B FINGERPRINT CARDS B HUMBLE GROUP JOHN MATTSON LIME TECHNOLOGIES MOMENTUM GROUP B ONEFLOW RENEWCELL SEDANA MEDICAL AB STORYTEL B SVENSKA NYTTOBOSTADER SWEDISH LOGISTIC PPTY B

Deletions
DEXTECH MEDICAL
ELANDERS
NORVA24 GROUP
SCOUT GAMING GROUP

VNV GLOBAL

MSCI UNITED KINGDOM INDEX

Additions AVACTA GROUP

ENERAOUA TECHNOLOGIES

FOCUSRITE
GYM GROUP
HARWORTH GROUP
HOTEL CHOCOLAT GROUP
IG DESIGN GROUP
INDUSTRIALS REIT (GB)
JERSEY OIL AND GAS
JONES (WATKIN)
LUCECO

MORTGAGE ADVICE BUREAU

NICHOLS

MARSTON'S

NUMIS CORPORATION
ON THE BEACH GROUP
RESTAURANT GROUP
ROBERT WALTERS

SABRE INSURANCE GROUP

SABRE INSURA SAGA SIGMAROC STRIX GROUP TREATT XP POWER Deletions ABINGDON HEALTH

BANK OF CYPRUS HOLDINGS BRAND ARCHITEKTS GROUP CHALLENGER ENERGY GROUP CHILL BRANDS GROUP FORESIGHT GROUP HLDGS HYDROGENONE CPTL GROWTH ICG LONGBOW SENIOR SEC

MERIT GROUP MORSES CLUB

NOSTRUM OIL & GAS
OMEGA DIAGNOSTICS GROUP
RAMBLER METALS & MINING
REAL ESTATE CREDIT INV

NON-STANDARD FINANCE

RPS GROUP TEKMAR GROUP TP GROUP

MSCI FINLAND INDEX

Additions
ASUNTOSALKKU
HARVIA
KAMUX
REMEDY ENTERTAINMENT
SPINNOVA
TOIVO GROUP
WITHSECURE

Deletions BANK OF ALAND B OMA SAASTOPANKKI

MSCI NEW ZEALAND INDEX

Additions RESTAURANT BRANDS SYNLAIT MILK Deletions None

MSCI IRELAND INDEX

Additions CORRE ENERGY(IE) Deletions None

MSCI ISRAEL INDEX

Additions ALPHA TAU MEDICAL ARGO PROPERTIES

BAIT WEGAG IAZMOT NADLAN

COGNYTE SOFTWARE
ELECTREON WIRELESS
ICON GROUP

Deletions
B COMMUNICATIONS
CARASSO MOTORS
ERIKA B-CURE LASER
GALMED PHARMACEUTICALS
GAMIDA CELL

INDAPTUS THERAPEUTICS

INFINYA INNOVIZ TECH

INROM CONSTRUCTION IND

ISRAEL LAND DEV NEOGAMES RAZOR LABS

SCOPE METALS TRAD & TECH TEL AVIV STOCK EXCHANGE

UROGEN PHARMA VASCULAR BIOGENICS XLMEDIA (IL)

MSCI SINGAPORE INDEX

Additions CHINA AVIATION OIL SG MARCO POLO MARINE

Deletions A SMART HOLDINGS HONG FOK CORP IPS SECUREX HOLDINGS OCEAN SKY INTERNATIONAL

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