

## ACENTDFB - LIST OF PATENTS (12)

### German Patents (8)

**(1) Title of invention:** A system for the development of treatment of diabetes mellitus from ethanolic extract of *Anogeissus leiocarpus*

Ein system zur entwicklung von ethanolischem extrakt aus anogeissus leiocarpus und behandlung von diabetes mellitus

**Reg. No.:** 20 2023 106 836

**Inventors:** Professor Adamu Sani (DVM, MSc, PhD), Dr. Emmanuel Owoicho Anefu (DVM, MSc), **Professor Emmanuel Oluwadare Balogun** (BSc, MSc, PhD), Professor King Akpofure Nelson Esievo (DVM, MSc, PhD)

**(2) Title of invention:** A system for detecting the healing activities of the ethanolic extract of *Anogeissus leiocarpus* on surgically created skin wounds

Ein system zum nachweis der heilaktivitaten des ethanolischen extrakts aus anogeissus leiocarpus auf chirurgisch hergestellten hautwunden

**Reg. No.:** 20 2023 106 837

**Inventors:** Professor Emmanuel Oluwadare Balogun (BSc, MSc, PhD), Professor King Akpofure Nelson Esievo (DVM, MSc, PhD) and Dr. Sabina Mbfan Num-Adom (DVM, MSc)

**(3) Title of invention:** A system for the production of bacterial cellulose hydrogel (BCH) from agricultural residues using *Gluconacetobacter orientalis*

Ein System zur Herstellung von bakteriellem Cellulosehydrogel (BCH) aus Agrarrückständen unter Verwendung von *Gluconacetobacter Orientalis*

**Reg. No.:** 20 2024 102 959

**Inventors:** Professor Emmanuel Oluwadare Balogun (BSc, MSc, PhD), Professor Yakubu Kokori Enevehe Ibrahim (B.Pharm, MSc, PhD), Mr. Lockta Joel (BSc), Mr. Barde Yelwa Luka (BSc, MSc), Dr. Sa'adiya Halima Mahmud (B.Pharm, MSc, PhD), Mr. Rabiou Bukar Mohammed (B.Pharm, MSc), Dr. Tahir Turaki Mohammed (MBBS, FWACP), Mr. Samuel Charles Olabode (BSc), Professor Abdullahi Balarabe Sallau (BSc, MSc, PhD), Professor Mohammed Nasir Shuaibu (BSc, MSc, PhD), and Mr. Ibrahim Zubairu Waziri (BSc)

**(4) Title of invention:** A system for the identification of 2-methylpyridine-3-yl-4-ethoxy-3-{1-methyl-7-oxo-3-propyl-1h,6h,7h-pyrazolo[4,3-d]pyrimidine-5-yl}benzene-1-sulfonate as a potent phospholipase A2 inhibitor

Ein System zur Identifizierung von 2-methylpyridin-3-yl-4-ethoxy-3-{1-methyl-7-oxo-3-propyl-1h,6h,7h-pyrazolo[4,3-d]pyrimidin-5-yl}benzene-1-sulfonat als potenter Phospholipase A2 -Inhibitor

**Reg. No.:** 20 2024 102 994

**Inventors:** Dr. Oluwafemi Abiodun Adepoju (BSc, MSc, MSc), Professor Emmanuel Oluwadare Balogun (BSc, MSc, PhD), and Professor Geoffrey Chang (BSc, MSc, PhD)

**(5) Title of invention:** A system for the identification of ethyl 2-{{2-butyl-4-oxo-3-{{4-[2-(2H-1,2,3,4-tetrazol-5-yl)phenyl]phenyl}methyl)-3H,4H,5H imidazo[4,5-c]pyridine-5-yl]methyl}benzoate as a potent inhibitor of phospholipase A2 (PLA2)

Ein System zur Identifizierung von Ethyl 2-{{2-butyl-4-oxo-3-{{4-[2-(2H-1,2,3,4-tetrazol-5-yl)phenyl]phenyl}methyl)-3H,4H,5H imidazo[4,5-c]pyridin-5-yl]methyl}benzoate als potenter Inhibitor von Phospholipase A2 (PLA2)

**Reg. No.:** 20 2024 102 911

**Inventors:** Dr. Oluwafemi Abiodun Adepoju (BSc, MSc, MSc), Professor Emmanuel Oluwadare Balogun (BSc, MSc, PhD), and Professor Geoffrey Chang (BSc, MSc, PhD)

**(6) Title of invention:** A system for the identification of 6-(3-{{3-(4-fluorophenyl)propyl}(methyl)amino}propanoyl)-2,3,4,5,6,7-hexahydro-1,3-benzoxazole-2-one as a potent phospholipase A2 activator

Ein System zur Identifizierung von 6-(3-{{3-(4-fluorophenyl)propyl}(methyl)amino}propanoyl)-2,3,4,5,6,7-hexahydro-1,3-benzoxazol-2-one als potenter von Phospholipase A2 -Aktivator

**Reg. No.:** 20 2024 102 915

**Inventors:** Dr. Oluwafemi Abiodun Adepoju (BSc, MSc, MSc), Professor Emmanuel Oluwadare Balogun (BSc, MSc, PhD), and Professor Geoffrey Chang (BSc, MSc, PhD)

**(7) Title of invention:** A system for the identification of 4-{3-[(2H-1,3-benzodioxol-5-ylmethyl)amino]-8-thia-4,6-diazatricyclo[7.4.0.0<sup>2,7</sup>]trideca-1(9),2(7),3,5-tetraene-5-yl}benzene-1-sulfonic acid as an inhibitor of phospholipase A2 (PLA2)

Ein System zur Identifizierung von 4-(3-{{(2-chloro-3-methoxyphenyl)methyl}amino}-8-thia-4,6-diazatricyclo[7.4.0.0<sup>2,7</sup>]trideca-1(9),2(7),3,5-tetraen-5-yl)benzoesaure als Inhibitor der Phospholipase A2 (PLA2)

**Reg. No.:** 20 2024 102 904

**Inventors:** Dr. Oluwafemi Abiodun Adepoju (BSc, MSc, MSc), Professor Emmanuel Oluwadare Balogun (BSc, MSc, PhD), and Professor Geoffrey Chang (BSc, MSc, PhD)

**(8) Title of invention:** A system for the identification of 4-{3-[(2H-1,3-benzodioxol-5-ylmethyl)amino]-8-thia-4,6-diazatricyclo[7.4.0.0<sup>2,7</sup>]trideca-1(9),2(7),3,5-tetraen-5-yl}benzoic acid as an inhibitor of phospholipase A2 (PLA2)

Ein System zur Identifizierung von 4-{3-[(2H-1,3-benzodioxol-5-ylmethyl)amino]-8-thia-4,6-diazatricyclo[7.4.0.0<sup>2,7</sup>]trideca-1(9),2(7),3,5-tetraen-5-yl}benzoesäure als Inhibitor der Phospholipase A2 (PLA2)

**Reg. No.:** 20 2024 102 904

**Inventors:** Dr. Oluwafemi Abiodun Adepoju (BSc, MSc, MSc), Professor Emmanuel Oluwadare Balogun (BSc, MSc, PhD), and Professor Geoffrey Chang (BSc, MSc, PhD)

### Nigerian Patents (4)

**(1) Title of invention:** Discovery of a tricyclic lactone dodoneine derivative and its application for treatment of infectious diseases

**Reg. No.:** NG/P/2023/54

**Inventors:** Professor Emmanuel Oluwadare Balogun (BSc, MSc, PhD) and Mr. John Wassagwa (BSc, MSc)

**(2) Title of invention:** Production of soluble *Trypanosoma brucei gambiense* phospholipase A<sub>2</sub>

**Reg. No.:** NG/P/2023/55

**Inventors:** Professor Emmanuel Oluwadare Balogun (BSc, MSc, PhD), Dr. Oluwafemi Adepoju (BSc, MSc, PhD), and Prof. Geoffrey Chang (BA, MS, PhD)

**(3) Title of invention:** Discovery of metalloproteinase in the venom of West African Saw-scaled carpet viper as a therapeutic peptide for African trypanosomiasis

**Reg. No.:** NG/P/2023/56

**Inventors:** Professor Emmanuel Oluwadare Balogun (BSc, MSc, PhD), Mr. Ilu Ameh (BSc, MSc), Dr. Mathias Ahii Chia (BSc, MSc, PhD), and Professor Mohammed N. Shuaibu (BSc, MSc, PhD)

**(4) Title of invention:** Development of molecular detection and genotyping method for *Toxoplasma gondii*

**Reg. No.:** NG/P/2023/57

**Inventors:** Professor Emmanuel Oluwadare Balogun (BSc, MSc, PhD) and Mr. Lamin B.S. Dibba (BSc, MSc)