

List of Patents and Patent Applications

Iwao Ojima

(a) Patents and Patent Applications in U. S. A. and European Countries

(Patents issued) (US Patents 46)

1. (i) "Process for producing silylether", Y. Nagai, I. Ojima, **U.S. Pat.** 3856843.
(ii) "Procede pour produire des silylether", Y. Nagai, I. Ojima, **French Pat.** 7321542.
2. "Process for producing alkoxyasilane", Y. Nagai, I. Ojima, T. Kogure, **U.S. Pat.** 3846463.
3. "Process for producing silylthioethers", Y. Nagai, I. Ojima, **U.S. Pat.** 3856842.
4. "Process for producing a substituted organosilane compound", Y. Nagai, I. Ojima, H. Kono, T. Kogure, S. Inaba, **Brit. Pat.** 1381463.
5. (i) "Process for preparing monosilanes from polysilanes", Y. Nagai, I. Ojima, S. Inaba, **U.S. Pat.** 3910980.
(ii) "Process for preparing monosilanes from polysilanes", Y. Nagai, I. Ojima, S. Inaba, **Brit. Pat.** 1401948.
(iii) "Verfahren zur Herstellung von Organosilanen", Y. Nagai, I. Ojima, S. Inaba, **German Pat.** 2409010.
(iv) "Procede de Preparation dun monosilane a partir de polysilane", Y. Nagai, I. Ojima, S. Inaba, **French Pat.** 2219168.
6. (i) "Vinylsilanes", Y. Nagai, I. Ojima, **Brit. Pat.** 1418609.
(ii) "Procede de preparation dun vinylsilane fonctionnel", Y. Nagai, I. Ojima, **French Pat.** 7422639.
7. (i) "Process for producing optically active α -hydroxycarboxylic acid esters", I. Ojima, T. Kogure, **Brit. Pat.** 1592536.
(ii) "Process for producing optically active α -hydroxycarboxylic acid esters", I. Ojima, T. Kogure, **Canadian Pat.** 1109479.
(iii) "Verfahren zur Herstellung von optisch aktiven α -Hydroxycarbonsaureestern", I. Ojima, T. Kogure, **Swiss Pat.** 635815.
8. (i) "Process for the preparation of dipeptides", I. Ojima, S. Suga **U.S. Pat.** 4,352,752.
(ii) "Process for the preparation of dipeptides", I. Ojima, S. Suga, **European Pat.** 0035743.
9. (i) "Process for producing perfluorocarbon group-containing aldehydes", I. Ojima, T. Fuchikami, **U.S. Pat.** 4,370,504 (1983).
(ii) "Process for producing perfluorocarbon group-containing aldehydes", I. Ojima, T. Fuchikami, **Brit. Pat.** 2072168.
(iii) "Verfahren zur Herstellung von eine Perfluorokohlenstoffgruppe enthaltenden Aldehyden", I. Ojima, T. Fuchikami, **German Pat.** P3108602.
(iv) "Procede de production daldehydes ayant un groupe perfluorocarbone", I. Ojima, T. Fuchikami, **French Pat.** 8104597.
(v) "Verfahren zur Herstellung von eine Perfluorokohlenstoffgruppe enthaltenden Aldehyden", I. Ojima, T. Fuchikami, **Swiss Pat.** 646130.
10. (i) "Preparation of 2-trifluoromethylpropanol by vapor phase hydrogenation of 2-trifluoromethylpropanal", T. Kawai, A. Negishi, I. Ojima, T. Fuchikami, **U.S. Pat.** 4540835 (1985).
(ii) "Preparation of 2-trifluoromethylpropanol by vapor phase hydrogenation of 2-trifluoromethylpropanal", T. Kawai, A. Negishi, I. Ojima, T. Fuchikami, **Brit. Pat.** 2109791.

- (iii) "Herstellung von 2-Trifluoromethylpropanol durch Dampfphasenhydrierung von 2-Trifluoromethylpropanal", T. Kawai, A. Negishi, I. Ojima, T. Fuchikami, **German Pat.** P3242618.
 - (iv) "Procede de preparation de 2-trifluoromethylpropanol par hydrogenation en phase vapeur de 2-trifluoromethylpropanal", T. Kawai, A. Negishi, I. Ojima, T. Fuchikami, **French Pat.** 2516504.
 - (v) "Procedimento di preparazione di 2-trifluorometilpropanolo per idrogenazione in fase vapore di 2-trifluorometilpropanale", T. Kawai, A. Negishi, I. Ojima, T. Fuchikami, **Italian Pat.** 1155371.
11. (i) "Process for the preparation of N-acyl- α -amino acids", I. Ojima, K. Hirai, **U.S. Pat.** 4497964.
(ii) "Process for the preparation of N-acyl- α -amino acids", I. Ojima, K. Hirai, **Brit. Pat.** 2111982.
(iii) "Verfahren zur Herstellung von N-Acyl- α -aminosauren", I. Ojima, K. Hirai, **German Pat.** P3242374.
(iv) "Procede de preparation de N-acyl- α -amino-acids", I. Ojima, K. Hirai, **French Pat.** 8219207.
 12. (i) "Production of 5-perfluoroalkyl-5,6-dihydrouracil Derivatives", I. Ojima, T. Fuchikami, M. Fujita, **U.S. Pat.** 4581452 (4/8/1986).
(ii) "Process for producing 5-perfluoroalkyl-5,6-dihydrouracil Derivatives", I. Ojima, T. Fuchikami, M. Fujita, **European Pat.** 0103436.
 13. (i) "Catalyst and method for isomerization", K. Hirai, T. Fuchikami, H. Hirose, I. Ojima, **U. S. Pat.** 4621150 (1986).
(ii) "Catalyst and method for isomerization", K. Hirai, T. Fuchikami, H. Hirose, I. Ojima, **UK. Pat. GB153692** (1992); **German Pat. DE3586403.6** (1992).
 14. (i) "Process for the preparation of polyfluoroalkyl halides", I. Ojima, T. Fuchikami, **European Pat.** 0115943 (Germany, France, Switzerland, Great Britain).
(ii) "Process for the preparation of polyfluoroalkyl halides", I. Ojima, T. Fuchikami, **U. S. Pat.** 5017718 (1991).
 15. "Analgesic peptides", I. Ojima, K. Nakahashi, **U.S. Pat.** 5,276,137 (1994).
 16. "Process for the Production of Chiral Hydroxy- β -Lactams and Hydroxyamino Acids Derived Therefrom", I. Ojima, **US Pat.** 5,294,737 (1994).
 17. "Antiaggregatory Agents for Platelet", I. Ojima, M. Eguchi, Y.-I. Oh, and B. S. Coller, **U.S. Pat.** 5,338,725 (1994).
 18. "Taxane Anti-tumor Agents and Process for the Preparation Thereof", I. Ojima and E. Bombardelli, **US Pat.** 5,475,011 (12/12/1995).
 19. "Anti-tumor Compounds, Pharmaceutical Compositions, Methods for Preparation Thereof and For Treatment", I. Ojima and E. Bombardelli, **US Pat.** 5,599,820 (2/4/1997).
 20. "Anti-tumor Compounds, Pharmaceutical Compositions, Methods for Preparation Thereof and For Treatment", I. Ojima and E. Bombardelli, **US Pat.** 5,705,508 (1/6/1998).
 21. "Taxoid Reversal Agents for Drug Resistance in Cancer Chemotherapy and Pharmaceutical Compositions Thereof", I. Ojima and R. J. Bernacki, **US Pat.** 5,811,452 (9/18/1998). **PCT Int. Appl. WO 98/30553.**
 22. "Hydrocarbonylations in Supercritical Carbon Dioxide", I. Ojima and H. Urata, **US Pat.** 5,962,744 (10/5/1999).
 23. "Taxoid Anti-Tumor Agents and Pharmaceutical Compositions Thereof", I. Ojima, **US Pat.** 6,096,909 (8/1/2000). **PCT Int. Appl. WO 97/32578.**
 24. "Taxoid Anti-Tumor Agents and Pharmaceutical Compositions Thereof", I. Ojima, **US Pat.** 6,100,411 (8/8/2000). **PCT Int. Appl. WO 97/32578.**

25. "Process for the Preparation of Taxane Derivatives and Beta-Lactam Intermediates Therefor", I. Ojima, **US Pat.** 6,187,916 (2/13/2001). **PCT Int. Appl. WO 94/18164**.
26. "Process for the Preparation of Taxane Derivatives and Beta-Lactam Intermediates Therefor", I. Ojima, **US Pat.** 6,218,553 (4/17/2001). **PCT Int. Appl. WO 94/18164**.
27. "Taxoid Anti-tumor Agents, Pharmaceutical Compositions, and Treatment Methods", I. Ojima, **US Pat.** 6,458,976 (10/1/2002).
28. "Taxoid Anti-tumor Agents, Pharmaceutical Compositions, and Treatment Methods", I. Ojima, **US Pat.** 6,500,858 (12/31/2002).
29. "Methods for Preparing New Taxoids and Pharmaceutical Compositions Containing Them", H. Bouchard, J.-D. Bourzat, A. Commerçon, I. Ojima, **US Pat.** 6,593,482 (7/15/2003).
30. "Taxoid Anti-tumor Agents and Pharmaceutical Compositions Thereof", I. Ojima, **US Pat.** 6,835,746 (12/28/2004).
31. "Drug Conjugates", I. Ojima
 - (i) **US Pat.** 7,282,590 B2 (10/16/07)
 - (ii) **Chinese Pat.** CN1933853 B (5/12/2012)
 - (iii) **Japanese Pat.** JP 5259087 (5/2/2013)
32. "Anti-tuberculosis Taxane Compounds for Use in Drug Resistance", I. Ojima, **US Pat.** 7,615,653 (11/10/09).
33. "Taxoid-Fatty Acid Conjugates and Pharmaceutical Compositions Thereof for Treatment of Cancer", I. Ojima,
 - (i) **US Pat.** US 7,820,839 B2 (10/26/2010)
 - (ii) **Chinese Pat.** CN1901901B (7/4/2012)
 - (iii) **Japanese Pat.** JP 4884228 (12/16/2012)
 - (iv) **European Pat.** EP 1,703,904 B1 (2/13/2013)
34. "Drug Conjugates with heterobifunctional linkers", I. Ojima, **US Pat.** 7,847,119 B2 (12/7/2010).
35. "Fluorotaxoids", I. Ojima, **US Pat.** 7,981,926 (9/13/2011).
36. "Benzimidazoles and Pharmaceutical Compositions Thereof", I. Ojima and S.-Y. Lee
 - (i) **US Pat.** US 8,232,410 (7/31/2012)
 - (ii) **Eurasia Pat.** 016726 (7/30/2012)
 - (iii) **South African Pat.** 2009/08136 (1/26/2011)
 - (iv) **European Pat.** EP 2154966 (8/21/2013)
 - (v) **Japanese Pat.** JP 5400032 (11/1/2013)
 - (vi) **Mexico Pat.** 316,023(12/2/2013)
37. " α - and β -Truxillic Acid Derivatives and Pharmaceutical Compositions Thereof", I. Ojima, D. Deutsch, M. Kaczocha, W. T. Berger, R. Rizzo, T. Balias, **US Pat.** 9,604,904 B2 (3/28/2017).
38. " α - and β -Truxillic Acid Derivatives and Pharmaceutical Compositions Thereof", I. Ojima, D. Deutsch, M. Kaczocha, W. T. Berger, R. Rizzo, T. Balias, **US Pat.** 10,213,406 B2 (2/26/2019).
39. "Therapeutic agent for treating tumors", I. Ojima, J. Vineberg, T. Wang, **US Pat.** 10,280,183 B2 (5/7/2019)
40. "Nanoemulsion Compositions of Taxoid Drugs, and Methods for the Use Thereof to Target Cancer Cells and Cancer Stem Cells", J. E. Egan, I. Ojima, M. M. Amiji, G. I. Botchkina, **US Pat.** 10,206,875 B2 (2/19/2019).
41. "Third-Generation Taxoids and Methods of Using Same", I. Ojima, C. Wang and X. Wang, **US Pat.** 10,550,093 B2 (2/4/2020)

42. "Alpha-truxillic acid derivatives and pharmaceutical compositions thereof", I. Ojima, D. Deutsch, M. Kaczocha, K. Hu, S. Tong, M. Elmes, S. Yan, **US Pat.** 10,968,163 B2 (04-06-2021)
43. " α - and γ -truxillic acid derivatives and pharmaceutical compositions thereof", I. Ojima, D. Deutsch, M. Kaczocha, W. T. Berger, R. Rizzo, T. E. Balius, **US Pat.** 11,026,910 (06-08-2021)
44. "Substituted quinazolines as matrix metalloproteinase-9 hemopexin domain inhibitors", Iwao Ojima, Vincent Alford, Anushree Kamath, Xiaodong Ren, Monaf Awwa, Jian Cao, Nicole Sampson, **US Pat.** 11040947B2 (06-22-2021)
45. "Anti-fungal Compounds Targeting the Synthesis of Fungal Sphingolipids", Iwao Ojima, Maurizio Del Poeta, Krupanandan Haranahalli, Cristina Lazzarini, Yi Sun, **US Pat.** 11,414,378 B2 (8/16/2022)
46. "Combination Taxoid Nanoemulsion with Immunotherapy in Cancer", James E. Eagan, Mansoor M Amiji, Iwao Ojima, **US Pat.** 11,497,713 B2 (11/15/2022)
47. "Alpha-Truxillic Acid Derivatives and Pharmaceutical Compositions Thereof", I. Ojima, D. Deutsch, M. Kaczocha, K. Hu, S. Tong, M. Elmes, S. Yan, **US Pat.** 11,739,047 B2 (8-29-2023).
48. "Anti-fungal Compounds Targeting the Synthesis of Fungal Sphingolipids", Iwao Ojima, Maurizio Del Poeta, Krupanandan Haranahalli, Cristina Lazzarini, Yi Sun, **US Pat.** 11,858,880 B2 (1/2/2024)
49. "Substituted pyrimidines as matrix metalloproteinase-9 hemopexin domain inhibitors", Iwao Ojima, Vincent Alford, Anushree Kamath, Jian Cao, Xiaodong Ren, Nicole Sampson, Monaf Awwa, **US Pat.** 12,018,003 B2 (06-25-2024)

(Patent Applications Published: Total 31)

1. "Hydrocarbonylations in Supercritical Carbon Dioxide", I. Ojima and H. Urata, *US. Pat. Appl.* (filed on 3/27/98, allowed on 11/23/98; US Patent granted in 1999, see above); PCT application (filed 3/15/99), **WO/1999/050214** (7/10/1999); Japanese Patent application (filed March 1999).
2. "Optically Active Phosphites and Phosphoramidites bearing Biphenol Skeletons with Axial Chirality, and Their Use in Catalytic Asymmetric Reactions", I. Ojima, M. Takai, and T. Takahashi, *PCT Patent Appl.* US/03/05790 (filed 2/27/03); **WO 2004/078766** A1 (9/16/04).
3. "Taxoid-Fatty Acid Conjugates and Pharmaceutical Compositions Thereof", I. Ojima, *US. Provisional Patent Appl.* 2003-515783 (filed 10/30/03); International Patent Application, *PCT/US04/36027* (filed on 10/28/04). **WO 2005041881** A2 (5/12/05). U.S. Pat. granted (10/26/10, see above); Chinese Pat. granted (7/4/2012, see above); Japanese Pat. granted (12/16/2012, see above); European Pat. granted (2/13/2013, see above).
4. "Drug Conjugates with heterobifunctional linkers", I. Ojima, *US. Provisional Patent Appl.* 60/544,033 (filed on 2/12/04). *US Patent Appl.* 11/053,655 (filed 2/8/05); *International Patent Application, PCT* (filed on 2/11/05); **WO 2005079398** A2 (9/1/05). US Patent granted (10/16/07, see above).
5. "Fluorotaxoids", I. Ojima, *US. Provisional Patent Appl.* 60/707,665 (filed on 8/12/05); *PCT Int. Appl.* **WO 2007021957** A2 (2/22/07). U.S. Patent granted (9/13/11, see above).
6. "Fluorotaxoid - Fatty Acid Conjugates and Pharmaceutical Compositions Thereof", I. Ojima, *US Provisional Patent Appl.* 60/821,967 (filed on 8/10/06); *PCT Int. Appl.* **WO 2008021242** A2 (2/21/08).
7. "Benzimidazoles and Pharmaceutical Compositions Thereof", I. Ojima and S.-Y. Lee, *US Provisional Patent Appl.* 60/912,980 (filed on 4/20/07); *International Patent Application, PCT/US* 08105084 (filed on 4/20/08); **WO 2008 130669 A1** (10/30/08); *US Patent Application*, 20100256203 (10/7/2010); US Pat. granted (7/31/2012, see above); Eurasia Pat. granted (7/30/2012, see above); South African Pat. (1/26/2011, see above); European Pat. granted (8/21/2013); Japanese Pat. granted (11/1/2013); Mexico Pat. granted (12/2/2013, see above).

8. “Carbon nanotube-based drug delivery systems”, J. Chen, S. S. Wong, and I. Ojima, US Patent Application 12/179,887 (filed on 7/25/08). *U.S. Pat. Appl. Publ.* **US 2010021471 A1** (1/28/10).
9. “Drug Conjugates with heterobifunctional linkers”, I. Ojima, *US Continuing Patent Application* 11/856,317 (filed on 10/23/08). *U. S. Pat. Allowed* (June 2010). US Patent granted (12/7/10, see above).
10. “Benzimidazoles and Uses Thereof”, I. Ojima, US Provisional Patent Appl. 61/594,322 (filed on 2/2/12); *International Patent Application*, PCT/US 2013/24601 (filed on 2/3/2013); **WO2013116823 A1** (8/8/2013)
11. “Novel Imidazoles as Antibacterial Agents”, I. Ojima, US Provisional Patent Appl. 61/691,009 (filed on 8/20/2012). “5-Carbonylamino-(sulfonamido-) substituted benz imidazoles and use thereof treatment of tuberculosis”, *International Patent Application*, PCT/US 2013/32083 (filed on 3/25/2013); **WO2013142326 A1** (9/26/2013).
12. “Benzimidazoles and Uses Thereof”, I. Ojima, US Provisional Patent Appl. 61/767,891 (filed on 2/22/2013). *International Patent Application*, PCT/US2013/32083 (filed on 3/25/ 2013); combined with Item 11.
13. “ α - and β -Truxillic Acid Derivatives and Pharmaceutical Compositions Thereof”, I. Ojima, D. Deutsch, M. Kaczocha, W. T. Berger, R. Rizzo, T. Balius, US Provisional Patent Appl. 61/674,108 (filed on 7/20/2012). *International Patent Application*, PCT/US 2013/051337 (filed on 7/19/2013); **WO2014015276 A1** (1/23/2014). *U.S. Pat. Appl. Publ.* **US 20150183715 A1** (7/2/2015). US Patents granted (3/28/2017 and 6/8/2021, see above).
14. “Polyphenolic Zinc-Binding Agents (Pezbins) Actively Promote the Inactivation of Cancer Stem Cells and Potentiate Cytotoxic Anti-Tumor Drug Substances”, L. M. Golub, G. I. Botchkina, I. Ojima, US Provisional Patent Appl. 61/666,504 (filed 6/29/2012). *International Patent Application*, PCT/US2013/048710) (filed on 6/28/13); **WO2014005089 A2** (1/3/2014).
15. “Asymmetric Bow-Tie Dendrimers as Versatile Platform for Drug Delivery and Diagnosis”, I. Ojima, T. Wang, Y.-H. G. Teng, US Provisional Patent Appl. (a) 61/875,943 (filed on 9/14/2013); (b) 62/035,794 (filed on 8/11/2014). “Synthesis of novel asymmetric bow-tie pamam dendrimer-based conjugates for tumor-targeting drug delivery”, *International Patent Application*, PCT/US2014/054655 (filed on 9/9/2014); **WO 2015038493 A1** (3/15/2015).
16. “Benzimidazoles and Uses Thereof”, I. Ojima and D. Awasthi, US Provisional Patent Appl. 61/907,610 (filed on 12/30/2013). U.S. Patent Appl. No. 62/033,808 (filed on 8/6/2014). PCT Application No. PCT/US2014/066286 (filed on 11/19/2014); **WO2015077276 A1** (5/28/2015); US Application No. 2015/037,704 (filed on 6/27/2016); China Application No. 201480063998.8 (filed on 5/23/2016).
17. “Preparation of conjugates of cytotoxic agents as therapeutic and/or diagnostic agents for treating and/or diagnosing tumors”, Iwao Ojima and Jacob. D. Vineberg, US Provisional Patent Appl. 61/954,908 (filed on 3/18/2014). “Therapeutic agent for treating tumors”, PCT Int. Appl., PCT/US2015/021343; **WO 2015143092 A1** (9/24/2015); US Patent granted (5/7/2019, see above).
18. “Third-Generation Taxoids and Methods of Using Same”, Iwao Ojima, Changwei Wang and Xin Wang, US Provisional Patent Appl. 62/187,510 (filed on 7/1/2015); PCT/US 2016/040615 (filed on 7/1/2016); **WO 2017004478 A1** (1/5/2017); US Patent granted (2/4/2020, see above).
19. “Matrix Metalloproteinase-9 Hemopexin Domain Inhibitors and Methods of Treatment”, Iwao Ojima, Vincent Alford, Anushree Kamath, Xiaodong Ren, Monaf Awwa, Jian Cao, Nicole Sampson, US Provisional Patent Appl. 62/474,905 (filed on March 22, 2017); PCT/US 18/23676 (filed on March 22, 2018); **WO 2018175670 A1** (9/27/2018); US Patent granted (6/22/2021, see above)
20. “ α -Truxillic acid derivatives and pharmaceutical compositions thereof”, I. Ojima, D. Deutsch, M. Kaczocha, K. Hu, S. Tong, M. Elmes, S. Yan, PCT Int. Appl. **WO 2017156354 A1** (9/14/2017); US Patent granted (4/6/2021, 8/29/2023, see above).
21. “Nanoemulsion Compositions of Taxoid Drugs, and Methods for the Use Thereof to Target Cancer Cells and Cancer Stem Cells”, J. E. Egan, I. Ojima, M. M. Amiji, G. I. Botchkina, US Provisional Patent Appl.

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22. "Anti-fungal Compounds Targeting the Synthesis of Fungal Sphingolipids", Iwao Ojima, Maurizio Del Poeta, Krupanandan Haranahalli, Cristina Lazzarini, Yi Sun, US Provisional Patent Appl. 62/521,069 (filed on 6/16/2017); PCT Int. Appl. (6/15/2018), **WO2018/232298 A1** (12/20/2018); US Patent granted (8/16/2022, see above)
 23. "Method of Inhibiting Fungal Ceramide Synthase for Treatment of Cryptococcus Neoformans Infection", Maurizio Del Poeta, Mansa Munshi, Krupanandan Haranahalli, Karen You, Iwao Ojima, **WO 2018/175480 A1** (9/27/2018); **US2020/0171132A1** (6/4/2020)
 24. "Preparation of aromatic and heteroaromatic acylhydrazones as anti-fungals compounds targeting the synthesis of fungal sphingolipids", Maurizio Del Poeta, Iwao Ojima, Cristina Lazzarini, Krupanandan Haranahalli, Yi Sun, **WO 2018/232298 A1** (12/20/2018)
 25. "Combination Taxoid Nanoemulsion with Immunotherapy in Cancer", James E. Eagan, Mansoor M Amiji, Iwao Ojima, US Provisional Patent Appl. 62/608,015 (files on 12/20/2017); **US2019/0183796 A1** (6/20/2019); **WO 2019/0183796** (6/20/2019). US Patent granted (11/15/2022, see above)
 26. "Truxillic acid monoester-derivatives as selective fabp5 inhibitors and pharmaceutical compositions and uses thereof", Iwao Ojima, Martin Kaczocha, Monaf Awwa, Antonella Pepe, **WO2022076820A1** (4/14/2022); **US20230365488A1** (11/16/2023)
 27. "Combination therapy using FABP5 inhibitors with taxanes for treatment of cancer", Iwao Ojima, Martin Kaczocha, Gregory Crbonetti, **WO2021108350 A1** (06/03/2021); **US20230017948 A1** (1/19/2023)
 28. "Acylhydrazone compositions and methods of use thereof", Iwao Ojima, Krupanandan Haranahalli, Maurizio Del Poeta, Ashna Garg, US Provisional Patent Appl. 63/252,795 (files on 10/06/2021); **WO 2023/060161 A1** (4/13/2023).
 29. Anti-fungal compounds targeting the synthesis of fungal sphingolipids", Iwao Ojima, Maurizio Del Poeta, Krupanandan Haranahalli, Cristina Lazzarini, Yi Sun, **US20240124392 A1** (4/18/2024)
 30. "Steryglucosidase inhibiting compositions and method of using", Iwao Ojima, Maurizio Del Poeta, Michael Airola, Nivea Pereira de Sa, SeungYoun Shin, Kalani Jayanetti, Dominick Rendina, and Ananya Shibana Thennarasu, **WO 2024/077078 A3** (4/11/2024).
 31. "Alpha-truxillic acid derivatives and pharmaceutical compositions thereof", I. Ojima, D. Deutsch, M. Kaczocha, K. Hu, S. Tong, M. Elmes, S. Yan, **US20240092725 A1** (3/21/2024).

(b) Japanese Patents and Patent Applications (Total 119)

(Japan Kokai Tokkyo Koho = Published Japanese Patent Application)

(Patents issued: Total 64)

1. "Process for Production of Alkoxysilanes", Y. Nagai, I. Ojima, T. Kogure, **Jpn. Pat.** 818620.
2. "Process for Production of Silyl Thioethers", Y. Nagai, I. Ojima, **Jpn. Pat.** 820674.
3. "Process for Production of Silyl Ethers", Y. Nagai, I. Ojima, **Jpn. Pat.** 826120.
4. "Process for Producing Silyl Ethers", Y. Nagai, I. Ojima, **Jpn. Pat.** 826121.
5. "Process for Production of Silylamines", Y. Nagai, I. Ojima, T. Kogure, **Jpn. Pat.** 826122.
6. "Process for Cleaving Polysilanes into Monosilanes", Y. Nagai, I. Ojima, S. Inaba, **Jpn. Pat.** 832026.
7. "Process for Producing Alkoxysilanes from Polysilanes", Y. Nagai, I. Ojima. S. Inaba, **Jpn. Pat.** 832027.
8. "Process for Producing Silylamines", Y. Nagai, I. Ojima, T. Kogure, **Jpn. Pat.** 836083.

9. "Process for Producing Optically Active Alcohols", Y. Nagai, I. Ojima, T. Kogure, **Jpn. Pat.** 851468.
10. "Process for Producing Optically Active α -Hydroxycarboxylic Esters", Y. Nagai, I. Ojima, **Jpn. Pat.** 865560.
11. "Process for Cleavage of Polysilanes", Y. Nagai, I. Ojima, S. Inaba, **Jpn. Pat.** 867542.
12. "Process for Producing Terpene Alcohols", Y. Nagai, I. Ojima, **Jpn. Pat.** 902565.
13. "Process for Selective Reductions of α,β -Unsaturated Terpene Carbonyl Compounds", Y. Nagai, I. Ojima, T. Kogure, **Jpn. Pat.** 915155.
14. "Process for Producing Organosilicon Compounds", Y. Nagai, I. Ojima, I. Ono, Y. Hiraga, Y. Suzuki, **Jpn. Pat.** 1010394.
15. "Process for Producing Optically Active Substituted Allylic Alcohols", I. Ojima, T. Kogure, Y. Nagai, **Jpn. Pat.** 1030598.
16. "Process for Producing Trialkoxysilanes", Y. Nagai, I. Ojima, I. Ono, Y. Hiraga, Y. Suzuki, **Jpn. Pat.** 1033313.
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