

ISSUED U. S. PATENTS

- [22] G. A. Frazier and A. C. Seabaugh, "Nanomechanical switches and circuits," *U. S. pat. number 6,548,841*, 15 April 2003.
- [21] G. A. Frazier and A. C. Seabaugh, "Nanomechanical switches and circuits," *U. S. pat. number 6,534,839*, 18 March 2003.
- [20] G. A. Frazier and A. C. Seabaugh, "Nanomechanical switches and circuits," *U. S. pat. number 6,495,905*, 17 December 2002.
- [19] A. C. Seabaugh, "Hot carrier transistors utilizing quantum well injector for high current gain," *U. S. pat. number 6,201,258 B1*, 13 March 2001.
- [18] A. C. Seabaugh, Y.-C. Kao, A. J. Purdes, and J. N. Randall, "Method of forming lateral resonant tunneling devices," *U. S. pat. number 6,139,483*, 31 October 2000.
- [17] H.-T. Yuan and A. C. Seabaugh, "Multiple peak resonant tunneling diode," *U. S. pat. number 5,981,969*, 9 November 1999.
- [16] A. C. Seabaugh, "Silicon resonant tunneling," *U. S. pat. number 5,796,119*, 18 August 1998.
- [15] A. C. Seabaugh, "Bipolar resonant tunneling transistor frequency multiplier," *U. S. pat. number 5,767,526*, 16 June 1998.
- [14] A. C. Seabaugh and C.-C. Cho, "Mixed barrier resonant tunneling," *U. S. pat. number 5,723,872*, 3 March 1998.
- [13] A. C. Seabaugh and G. A. Frazier, "Magnetic field sensor using heterojunction bipolar transistors," *U. S. pat. number 5,680,280*, 21 October 1997.
- [12] R. M. Wallace and A. C. Seabaugh, "Silicon oxide resonant tunneling diode structure," *U. S. pat. number 5,606,177*, 25 February 1997.
- [11] G. A. Frazier and A. C. Seabaugh, "Multi-function resonant tunneling logic gate and method of performing binary and multi-valued logic," *U. S. pat. number 5,563,530*, 8 October 1996.
- [10] A. C. Seabaugh, "Resonant tunneling transistor noise generator," *U. S. pat. number 5,554,860*, 10 September 1996.
- [9] E. A. Beam III and A. C. Seabaugh, "Integrated field effect transistor and resonant-tunneling-diode," *U. S. pat. number 5,534,714*, 9 July 1996.
- [8] A. C. Seabaugh, C. H. Mikkelsen, and G. A. Frazier, "Coupled-quantum-well field-effect resonant tunneling transistor for multi-valued logic/memory applications," *U. S. pat. number 5,512,764*, 30 April 1996.
- [7] A. C. Seabaugh and H. H. Hosack, "Method of forming implanted silicon resonant tunneling barriers," *U. S. pat. number 5,422,305*, 6 June 1995.
- [6] E. A. Beam III and A. C. Seabaugh, "Method of making an integrated field effect transistor and resonant-tunneling-diode," *U. S. pat. number 5,416,040*, 16 May 1995.
- [5] Y.-C. Kao, A. C. Seabaugh, H.-Y. Liu, and J. H. Luscombe, "Rotation induced superlattice," *U. S. pat. number 5,415,128*, 16 May 1995.
- [4] A. C. Seabaugh, "Lateral resonant tunneling transistor with heterojunction barriers," *U. S. pat. number 5,408,106*, 18 April 1995.
- [3] A. C. Seabaugh, "Method for fabricating lateral resonant tunneling transistor with heterojunction barriers," *U. S. pat. number 5,234,848*, 10 August 1993.
- [2] A. C. Seabaugh, "Integration of lateral and vertical quantum-well transistors in the same epitaxial stack," *U. S. pat. number 5,179,037*, 12 January 1993.
- [1] A. C. Seabaugh and R. J. Mattauch, "Controlled in situ etchback," *U. S. pat. number 4,373,989*, 15 February 1983.

FOREIGN PATENTS

- [10] I. Obeid, A. C. Seabaugh, A. H. Taddiken, "Improvements in or relating to electrical circuits" *European appl. number 96116660.0-2214* [TI-21425] 8/24/95.
- [9] A. C. Seabaugh, "Silicon-based resonant tunneling diode implantation fabrication method," *Japanese pat. number 8,046,222*, 16 February 1996.
- [8] A. C. Seabaugh, "Silicon -based resonant tunneling diode," *Japanese pat. number 8,018,029*, 19 January 1996.
- [7] T. P. E. Broekaert, A. C. Seabaugh, and C.-C. Cho, "Resonant tunneling devices having tunnel barriers made of two different materials e.g. CaF₂ and silica," *European pat. number 697,741*, [TI 19628,19629] 21 February 1996.
- [6] A. C. Seabaugh and H. H. Hosack, "Silicon-based resonant tunneling diode," *European pat. number 651,447*, [TI 18681] 3 May 1995.
- [5] G. A. Frazier and A. C. Seabaugh, "Multi-function resonant tunneling logic for arithmetic calculations," *Japanese pat. number 7,007,416* [TI-16931] 10 January 1995.
- [4] G. A. Frazier and A. C. Seabaugh, "Multi-function resonant tunneling logic for arithmetic calculations," *European pat. number 596,691* [TI-16931] 11 May 1994.
- [3] A. C. Seabaugh, "Lateral resonant tunneling transistor with heterojunction barriers," *Japanese pat. number. 5251713*, 28 September 1993.
- [2] Y.-C. Kao, A. C. Seabaugh, H.-Y. Liu, and J. H. Luscombe, "Rotation-induced superlattice," *Japanese pat. number 5,114,768* [TI-15221] 7 May 1993.
- [1] Y.-C. Kao, A. C. Seabaugh, H.-Y. Liu, and J. H. Luscombe, "Method of forming a rotation-induced superlattice structure and superlattice structure," *European pat. number 508,463* [TI-15221] 14 October 1992.