

## PATENTS

## Recent patent applications in peptide nucleic acids

Patent #	Subject	Assignee	Author	Date	Status
US 5821060	Nucleic acid analysis by hybridization with peptide nucleic acids; useful for DNA sequencing, mapping, and diagnostics.	Atom Sciences (Oak Ridge, TN)	Arlinghaus HF, Jacobson K	10/13/98	A
WO 9842735	New labeled-peptide nucleic acid monomers and oligomers; used to bind to nucleic acids for diagnostic and therapeutic purposes.	Boehringer Mannheim (Germany)	Bergmann F, Herrmann R, Koch T, Seidel C	10/10/98	A1
WO 9842876	Delivering compounds to cells as new conjugate with detoxified exotoxin A, which is able to cross membranes and deliver to the cytoplasm (e.g., DNA, peptide nucleic acids, antibodies, tumor suppressors).	Univ. Texas (Austin, TX)	Draper RK	10/01/98	A1
JP 10231290	Preparation of nucleic acid-binding compounds where first protecting group is removed by strong base and second protecting group by strong acid; useful for preparation of molecules sensitive to strong acids (e.g., peptide nucleic acid, DNA chimeras, and conjugates).	Boehringer Mannheim (Germany)	Batz H, Hansen HF, Koch T, Kofoed T, Orum H	9/2/98	A
WO 9836098	Diagnosis of glaucoma by detecting mutations or altered expression in specific genes, and treatment with nucleic acid probes or antibodies against mutant protein.	Univ. Connecticut (Storrs, CT)	Sarfarazi M	8/20/98	A1
US 5789573	Inhibiting translation of capped target mRNA by contact with oligonucleotide having modified 2'-position, oligonucleoside, or peptide nucleic acid that is specifically hybridizable with a 5' cap region of the target mRNA.	Isis Pharmaceuticals Inc. (Carlsbad, CA)	Anderson KP, Baker B, Bennett CF, Condon TP	8/4/98	A
WO 9827105	Dioxetane-labeled nucleic acid, peptide nucleic acid, protein, steroid, or carbohydrate probe, used in hybridization, immunoassays, gel-based assays, and capillary zone electrophoresis.	Tropix Inc. (Bedford, MA)	Bronstein I, Edwards B, Martin C, Voyta J	6/25/98	A1
WO 9820162	Electrodes linked via conductive oligomers to nucleic acids that may be used as gene probes in molecular biology and diagnostic medicine.	Clinical Micro Sensors (Pasadena, CA)	Gozin M, Kayyem JF, O'Conner SD, Yu C	5/14/98	A2
EP 839828	New (N-nucleo-base-N-carboxyalkyl-amino)alkyl nucleotide ester; useful for making peptide DNA compounds and oligonucleotides for control of gene expression, antisense therapeutics, etc.	Bayer AG (Wuppertal, Germany)	Jordan S, Schwemler C	5/6/98	A1
WO 9816550	New proline-based chiral-peptide nucleic acid compounds having strong hybridization activity; useful as antigene or antisense agents.	Isis Innovation Ltd. (Oxford, UK)	Lowe G	4/23/98	A1
WO 9815648	Peptide nucleic acid probes for detection of ribosomal nucleic acid of mycobacteria; allow differentiation between species of tuberculosis, and can penetrate cell membranes without pretreatment.	DAKO A/S (Glostrup, Denmark)	Lund K, Mollerup TA, Stender H	4/16/98	A1
US 5736392	Peptide nucleic acid complexes with DNA-lipid compositions; useful for enhancing cationic lipid transfection of eukaryotic cells.	Life Technologies Inc. (Gaithersburg, MD)	Hawley-Nelson P, Jessee JA, Lan J, Schifferli KP, Shih P	4/7/98	A
US 5721102	Nucleic acid assay based on surface-enhanced Raman scattering, for detecting bacteria and viruses in body fluids, foods, environmental samples, etc.	Lockheed Martin Energy Systems Inc. (Bethesda, MD)	Vo-Dinh T	2/24/98	A
WO 9804571	New multimeric oligonucleotide(s) containing multimerizing, hybridizing, and linker domains that form easily separated aggregates when hybridized to specific targets; used for purification of antisense molecules from failure sequences formed during synthesis.	Hybridon Inc. (Milford, MA)	Agrawal S, Habus I, Kandimalla ER	2/5/98	A2
WO 9741150	Peptide nucleic acids complementary to mitochondrial genes; used for antisense therapy, including a peptide to provide mitochondrial targeting.	Univ. Newcastle-upon-Tyne (UK)	Lightowlers RN, Taylor RW, Turnbull DM	11/6/97	A2
WO 9739024	Cyclic prodrugs of biologically active peptide or peptide nucleic acid prepared using hydroxy carboxylic acid linker.	Kansas Univ. (Lawrence, KS)	Borchardt DT, Gangwar S, Siahaan T, Stella VJ, Wang B, Borchardt RT	10/23/97	A1
WO 9738013	New peptide nucleic acids hybridizing to mammalian telomerase RNA; used to inhibit telomerase, for treating tumors and other proliferative diseases, and for diagnosis.	Geron Corp. (Menlo Park, CA)	Corey D, Norton JC, Piatyszek MA, Shay JW, Wright WE	10/16/97	A1

Source: Derwent Information, Alexandria, VA. \*The patents in the table are pending. The status of each application is slightly different from country to country. For further details, contact Derwent Information, 1725 Duke St., Suite 250, Alexandria, VA 22314. Tel: 1 (800) DERWENT (info@derwent.com).