

## KEI briefing note 2022:2<sup>1</sup>

### U.S. federal government FAR 52.227-1 authorizations (for non voluntary use of patents) disclosed in 166 SEC exhibits

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- The public is not generally aware of the extent to which the U.S. government grants private companies the right to use current and future patented inventions, and this lack of awareness extends to U.S. government officials and Members of the U.S. Congress.
- This briefing note reports on 166 U.S. contracts disclosed to the U.S. Securities and Exchange Commission (SEC) that contain broad compulsory licenses to use patented inventions without the consent of patent holders when the use is “by or for” the U.S. government, under [28 U.S. Code § 1498](#).
- An earlier July 19, 2022 KEI briefing note focused on COVID 19 contracts obtained through FOIA litigation found that 59 of 62 contracts examined included an authorization to use patents without consent of patent holders, for a wide range of COVID 19 countermeasures. These nonvoluntary authorizations occurred at the same time the U.S. government was opposing a waiver of TRIPS rules on patents for therapeutics and diagnostic devices, and seeking restrictive rules for TRIPS rules on non voluntary use of patents for COVID 19 vaccines. ([KEI Briefing Note 2022:1](#), Selected U.S. Government COVID Contracts with Authorization and Consent to Non-Voluntary Use Of Third Party Patents).

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<sup>1</sup> Prepared by James Love with assistance from Lokesh Vyas.

- This briefing note identifies 166 contracts disclosed to the U.S Securities and Exchange Commission (SEC) that permit companies to use patented inventions without the consent of patent holders. The compulsory licenses were granted for a diverse set of purposes, and many by different federal government agencies.
- Due to the SEC standards for disclosure, which address the interests of investors and not the general public, most U.S. government contracts that contain an authorization for nonvoluntary use of patents are not disclosed in SEC filings, and are only available through litigation or U.S. Freedom of Information Act (FOIA) requests, subject to extensive redactions.
- Only 3 of the 166 contracts disclosed in SEC filings were among the 62 COVID 19 contracts described in KEI Briefing Note 2022:1.
- The actual number of U.S. contracts that include an authorization and consent for non voluntary use of patents is such higher.
- The U.S. authorizations involve a reference in a contract to a federal acquisition regulation, FAR 52.227-1, titled “authorization and consent,” and typically apply to all U.S. granted patents, without identifying specific patents or notifying patent holders.
- The authority to grant a FAR 52.227-1 authorization and consent is highly decentralized, managed by federal contracting officers.
- The use of FAR 52.227-1 authorization and consent in contracts should be more transparent, to avoid giving the public an incomplete and distorted understanding of the role of patent exclusivity.
- The U.S. government use authorizations are implemented through a statutory elimination of the availability of injunctions to remedy infringement. Exceptions to enforce the exclusive rights of a patent holder through an injunction are allowed under Article 44 of the TRIPS Agreement, and while widely used by the U.S. government, is not generally appreciated as a possible mechanism for non voluntary use of patents by other WTO members. Limitations on the availability of injunctions provide a particularly uncomplicated mechanism for compulsory licensing of patented inventions, as is described in further detail in KEI Briefing Note 2022:3, Selected differences between Articles 30, 31 and 44 of the WTO TRIPS Agreement as regards non-voluntary use of patented inventions.

## **Introduction**

The United States has an usually straightforward and extensively used system for granting exceptions to the exclusive rights of a patented invention, when use is “by or for” the federal government. The U.S. approach provides the federal government with an automatic right to use any U.S. granted patent, subject to compensation to the patent holder, but without the possibility of an injunction. This right can be extended to non federal actors, such as a company providing a good or a service, through a simple authorization and consent. The authorization and consent can be implicit or explicit, and in writing or even oral. In practice, the federal government has four related regulations (FAR 52.227-1, 52,227-2, 52.227-3 and 52.227-4) that are often used to simplify the process. A brief sentence simply noting that a contract includes, by reference, FAR 52.227-1 can be used by an agency to grant the exception to the exclusive rights of a patent. The U.S. system allows such authorizations to be made by civil servants known as contracting officers. The authorizations are limited to the scope of the goods or services provided under the contract, but also are very broad, typically covering all U.S. current or future patents, without requirements to identify specific patents, or negotiate or even notify patent holders.

The frequency at which the U.S. federal government provides such authorization and consent clauses in contracts is not widely appreciated. In July, 2022, KEI published a report that identified 59 COVID 19 related contracts that contained an authorization and consent to use U.S. patents without the consent of the patent holder, and this list was not exhaustive. ([2022:1 KEI Briefing Note](#): Selected U.S. Government COVID Contracts with Authorization and Consent to Non-Voluntary Use Of Third Party Patents.)

On September 17, 2022, KEI searched the U.S. Securities and Exchange (SEC) database of corporate disclosure and identified 166 contracts that included an authorization and consent clause. A table with links to those contracts and selected metadata is attached below.

## **Statutory and Regulatory Framework**

The U.S. law, statute [28 U.S. Code § 1498](#), titled Patent and copyright cases, provides broad government use exceptions to patents, copyrights, designs and *sui generis* protections relating to plant varieties and semiconductor chips. As regards patented inventions, the U.S. government can use or authorize a third party to use any patent issued by the U.S. government, for a use “by or for” the government. Specifically, 28 USC § 1498(a) provides that:

“Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner's remedy shall be by action against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture.”

The U.S. government can allow a third party to use patents through an explicit or implicit authorization, which can be written or even oral. An important mechanism for such authorizations is found in the U.S. government Federal Acquisitions Regulations (FAR). In particular are four sections in the FAR that are most relevant. The first concerns the authorization to use patents, the second cooperation in providing information relevant to infringement claims, the third and fourth relate to obligations by the contractor to reimburse (indemnify) the government for any costs or compensation to patent holders.

[FAR 52.227-1](#) is titled Authorization and Consent. This regulation includes options and is revised from time to time, and contracts that reference or use the regulation may cite both the regulation and the month and year of the revision, and a reference to either the standard clause or Alternatives I or II. The authorization is quite broad, and in the most common cases covers all U.S. patents. The standard language begins with this sentence.

“The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent - “

In these cases, the government does not have to identify specific patents or proactively notify patent holders, and there is no requirement for negotiations with patent holders on reasonable commercial terms. These authorizations can and do cover a wide range of

activities, as illustrated below for contracts that companies have disclosed as exhibits in their U.S. Securities and Exchange (SEC) filings.

[FAR 52.227-2](#), titled “Notice and Assistance Regarding Patent and Copyright Infringement,” requires the contractor to provide the U.S. government with “all evidence and information” pertaining to a “claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract.”

[FAR 52.227-3](#), titled “Patent Indemnity,” requires the contractor to compensate the government (to indemnify) for any “liability, including costs, for infringement of any United States patent” relating to the performance under the contract. There are conditions on when the indemnity shall apply (the contractor has to have timely notice and opportunity to participate in defense of any claim), and exceptions, such as a change in the contract or when a claim is “unreasonably settled without the consent of the Contractor.”

[FAR 52.227-4](#), titled “Patent Indemnity-Construction Contracts” addresses the indemnify obligations when the contract involves construction.

51 of the 166 contracts included either a 52.227-3 or 52.227-4 patent indemnity clause.

### **Contracts disclosed in SEC filings with 52.227-1 authorization and consent**

The United States Securities and Exchange Commission requires certain companies that sell securities in the United States to make a number of disclosures. The SEC mandated disclosures cover a wide range of topics, as illustrated by the [SEC Disclosure Guidance](#). One consequence of these obligations is the disclosure of contracts that may have a material impact on the value of a company to investors.

On September 16, 2022, KEI searched the SEC database for contracts that included a reference to the FAR 52.227-1, the authorization and consent for use without consent of U.S. granted patents. This search, which is likely incomplete, provided links to 166 contracts, involving 114 different firms.

KEI has reviewed each of the 166 contracts, and provides as an attachment a list of the contracts, including metadata on the agency providing the authorization and consent, the firms involved, the purpose of the contract, and whether the contracts included, in addition to the 52.227-1 reference, a reference to 52.227-2, 52.227-3 or 52.227-4.

Among the 166 contracts, 88, or slightly more than half, were issued by the U.S. Department of Defense (DOD) or one of its subsidiary agencies or departments. While several of the DOD contracts involved weapons or similar military products or services, a significant number involved biomedical procurement or research and development activities. Examples of the DOD biomedical procurement or R&D contracts are described in Table 1.

**Table 1: Examples of DOD biomedical authorization and consent contracts**

- SARS-CoV-2 mRNA-1273 Vaccine
- Novavax nanoparticle vaccine against COVID-19
- Broad Spectrum Countermeasures for Viral and Bacterial Sepsis,
- Hemorrhagic Fever Virus Therapeutic.
- Marburg virus countermeasures.
- Overcoming Resistance by the Application of Boron to Ribosomal Inhibitors
- H1N1 Countermeasure Development.
- Broad Spectrum Antibacterial Therapeutics from Marine Natural products
- aGal Adjuvant Technology for Biodefense Agents
- manufacture of Three Adenovirus Vectors Encoding Plasmodium falciparum Sporozoite/Liver Stage Antigens with Stability Program
- Improved Venezuelan Equine Encephalitis Virus Vaccines
- Advanced Development of Entolimod (CBLB502) To Mitigate and Treat the Acute Effects of Ionizing Radiation
- Sufentanil NanoTab Development
- Obtain FDA clearance for the PoNS™ 4.0 device
- NeuroHabilitation Corporation's (NHC) Portable Neuromodulation Stimulator (PoNS™) aid to therapy for chronic balance deficits resulting from a mild to moderate traumatic brain injury (TBI).

The next largest group of SEC disclosed contracts with a 52.227-1 authorization and consent is the U.S. Department of Health and Human Services (HHS). This included 60 contracts, of which 33 were granted by the Biomedical Advanced Research and Development Authority (BARDA), and others by the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC) and the Office of Public Health Emergency Medical Countermeasures (OPHEMC).

Nine contracts involve the U.S. Department of Energy, and other contracts involve the Department of Homeland Security, the National Aeronautics and Space Administration (NASA), the Social Security Administration and the United States Office of Personnel Management (OPM).

**The contracts disclosed in SEC filings are but a small fraction of the contracts issued by the U.S. government that include a 52.227-1 authorization and consent clause.**

Not all entities obtaining such an authorization are subject to SEC disclosure obligations, and among those that are, the publishing of a contract is only required when material to the value of the firm to investors.

To illustrate the lack of transparency of 52.227-1 authorizations, consider the July 19, 2022, KEI report ([KEI Briefing Note 2022:1](#)) on "Selected U.S. Government COVID Contracts with Authorization and Consent to Non-Voluntary Use Of Third Party Patents." The KEI report was based upon data from contracts obtained from the U.S. government under Freedom of Information Act (FOIA) requests. Among 62 COVID 19 related contracts issued by the U.S.

government for which it could be determined if the government used this authority, 59 included an express authorization and consent to use U.S. granted patents without consent from patent holders. Among those 59 contracts, only three are included in the list of 166 contracts found in the SEC database. In other words, 56 of the 59 contracts obtained under FOIA were not disclosed in SEC filings.

In general, the SEC requires disclosure of information that is considered material to an investor's investment decision. The larger the firm, the less likely the firm will disclose a federal contract as an exhibit. This can be illustrated when comparing the COVID 19 contracts obtained under FOIA, and the contracts disclosed to the SEC.

The few contracts in the SEC EDGAR database that involve large firms are contracts between the large firm and a smaller firm, as a subcontractor or collaborator, where the smaller firm makes the disclosure of the contract.

## **Officials who grant a U.S. authorization and consent for use of patents without consent of patent holders**

The COVID 19 and the SEC contracts illustrate how the U.S. authorization and consent process works. Unlike many other countries, an authorization for a government use exception to the exclusive rights of a patent does not require a decision by the patent office or high level officials such as a Minister. The highly decentralized system used by the U.S. government typically relies on decisions by a contracting office (CO), who holds a warrant to exercise the authority to bind the federal government to a contract. (Discussion of the DOD approach [here](#))

## **Consistency with WTO TRIPS provisions**

There are three Articles in the TRIPS agreement that have relevance to the U.S. approach to use of patents "by or for" the federal government without the permission from patent holders.

TRIPS Article 30, titled Exceptions to Rights Conferred, permits WTO members to provide "limited exceptions to the exclusive rights conferred by a patent" subject to a requirement that "such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties." Some trade officials in the U.S. consider the U.S. liberal use of 52.227-1 authorizations during the COVID 19 pandemic to be consistent with Article 30 of the TRIPS.

Article 31 of the TRIPS, titled "Other Use Without Authorization of the Right Holder" sets out several rules that must be met to allow non-voluntary use of patents. The requirement for prior negotiation with rights holders is waived in the case of "public non-commercial use," as well as for "a national emergency or other circumstances of extreme urgency."

However, Article 31 also includes a number of other provisions which could be considered restrictive, depending upon future WTO jurisprudence.

Article 44 of the TRIPS, on injunctions, is perhaps that place where the U.S. government approach is most clearly consistent, including in particular, the highly permissive last sentence in paragraph 2, which states that injunctions can be eliminated when a WTO member provide the possibility of declaratory judgments and adequate compensation, two conditions that are available in the U.S. law. In other words, the U.S. approach to government use is not to grant a compulsory license, but to limit the remedies for non-voluntary use to compensation. The “reasonable” compensation standard in U.S. law is certainly to be considered to meet the “adequate” standard in the Article 44.2 of the TRIPS, particularly given the discretion afforded to WTO members by Article 1 of the TRIPS, which provides that “Members shall be free to determine the appropriate method of implementing the provisions of this Agreement within their own legal system and practice.” Using the flexibility in Article 44, a WTO member can effectively create liability rules, which provide the freedom to use patented inventions, subject to an obligation to provide compensation or remuneration to the patent holders.

A discussion of the differences between Article 30, 31 and 44 in TRIPS is available in KEI Briefing Note 2022:3 Selected differences between Article 30, 31 and 44 of the WTO TRIPS Agreement as regards non-voluntary use of patented inventions. Table 2 summaries some of the important differences between the three legal mechanisms.

**Table 2: Selected differences between Article 30, 31 and 44 for non voluntary use of patented inventions**

	Article 30, Exceptions to Rights Conferred	Article 31, Other Use Without Authorization of the Right Holder	Article 44 (injunctions denied or not available under national law)
Exceptions do not unreasonably conflict with a normal exploitation of the patent or unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties.	Yes	No	No
Authorization of such use shall be considered on its individual merits	No	Yes	No
Efforts to obtain authorization from the right holder on reasonable commercial terms and conditions and that such efforts have not been successful within a reasonable period of time	No	Yes, except for national emergency or other circumstances of extreme urgency or in cases of public non-commercial use.	No

Use shall be authorized predominantly for the supply of the domestic market of the Member authorizing such use;	No	Yes, except when remedy to anticompetitive practice or regulated under Article 31bis or the June 17, 2022 agreement on TRIPS	No
Authorization for such use shall be liable, subject to adequate protection of the legitimate interests of the persons so authorized, to be terminated if and when the circumstances which led to it cease to exist and are unlikely to recur. The competent authority shall have the authority to review, upon motivated request, the continued existence of these circumstances;	No	Yes	No
Compensation/remuneration required?	Not required, but is taken into account in considering the reasonableness of the exception.	Required	Required

### **Recommendation to improve transparency**

The extent that the U.S. government provides broad authorizations to use patented inventions without consent from patent holders is unknown, and judging from the diverse commentary on compulsory licensing, not widely appreciated. The data from KEI briefing Note 2022:1 benefited from the use of the U.S. government freedom of information laws, which can be a cumbersome and time consuming endeavor, and often involve substantial redactions. The SEC filings used in this briefing note are generally less redacted than contracts obtained for COVID 19 countermeasures, but the number of contracts available to the public is limited due to the SEC's own more narrow standards and limited authority for requiring disclosure. For example, there are few disclosures from large firms and none from companies not regulated by the SEC.

Compulsory licenses or government use authorizations for patents in non-US jurisdictions are typically transparent. Judicial decisions to withhold injunctions in favor of royalty payments are also transparent.

When patented inventions are subject to government rights due to federal funding of inventions, patent applicants are required to make a public disclosure that is published with

the patent. [35 U.S.C. 202(c)(6).] Federal agencies that propose granting exclusive rights to a US owned patent not subject to a CRADA are required to first provide the public with an opportunity to comment on the license. [35 USC 209(e)].

Internationally, the U.S. government has supported requirements in the TRIPS agreement (Article 31bis and the June 17, 2022 WTO decision on TRIPS) that require governments to notify the WTO TRIPS Council when granting compulsory licenses.

In contrast to the practice in many countries, the U.S. compulsory licensing for government use is largely a stealth program. With the exception of a handful of contracts disclosed in FOIA requests, litigation between parties and in SEC filings, the U.S. system of non-voluntary use of patented inventions is generally secret, giving the public an incomplete and distorted understanding of the role of patent exclusivity.

Given the public interest in more transparency of the patent system, agencies that issue a FAR 52.227-1 or similar authorization should be required to publish on their web page a list of the contracts that include such a provision.

**Attachment: Table 3: List of contracts disclosed in SEC filings that include U.S. federal government authorization and consent to use patented inventions without consent from the patent holder.**

This table is based upon data from the tab SEC 52.227-1 in the Google Sheet available [here](#).

Table 3: SEC-1498-contracts

Contract, PO, etc ID	URL	FAR 52.227-1	FAR 52.227-2	FAR 52.227-3 / 52.227-4	Government party	Dept or Agency	Private party	Date	Notes
HSHQDC-10-C-00034	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Department of Homeland Security	DHS	Genvec, Inc.	2010-02-12	Foot-and-Mouth Disease (FMD) vaccine R&D countermeasure programs at PIADC
W81XWH-15-C-0046	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	USA Med Research ACQ Activity	DOD	Acelrx Pharmaceuticals INC. Redwood City CA	2015-05-11	Sufentanil NanoTab Development
FA8075-18-D0001	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Defense Technical Information Center (DTIC)	DOD	Adams Communication & Engineering Technology, Inc. F	2020-10-20	Unmanned and Robotic Systems for the Naval Postgraduate School (NPS)
W58RQZ-05-C-0338	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	US ARMY AVIATION & MISSILE COMMAND	DOD	AeroVironment Inc. Monrovia, CA	2005-08-28	Contracting officer located in Iraq, depot level maintenance and repair for the RQ-11A Raven mini-UAV.
WE1P4Q-12-C-0263	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Army Contracting Command Redstone CCAM-TV	DOD	AeroVironment Inc. Monrovia, CA	2012-08-30	
H92222-08-D-0048	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Special Operations Command	DOD	AeroVironment, Inc. Monrovia, CA	2008-06-30	Produce AECV SUAS and Spares for LRIP and FRP.
W31P4Q-11-D-0032	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	No	US ARMY CONTRACTING COMMAND	DOD	AeroVironment, Inc. Monrovia, CA	2011-03-01	Technology Development and Integration Program for a Lethal Miniature Aerial Munition System
N66001-11-C-4188	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Space and Naval Warfare Systems Command (S	DOD	Aethlon Medical, Inc. San Diego, CA	2011-09-30	Broad Spectrum Countermeasures for Viral and Bacterial Sepsis using Dialysis-Like Devices
N00014-08-C-0093	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Office of Naval Research	DOD	Altairnano Inc Reno NV	2008-01-29	Backup power systems for naval applications
N00014-09-C-0547	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Office of Naval Research	DOD	Altairnano, Inc. Reno, NV	2009-05-22	Validate Altairnano's nano-lithium titanate (nLTO) based battery systems allowing the Navy to make a decision on the a
W911NF-09-C-0135	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	US Army	DOD	Altairnano, Inc.	2009-09-03	Developing Sensitive and Selective Nanosensors: A Single Molecule - Multiple Excitation Source Approach
W56HZV-08-C-0311	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Marine Corps, U.S. Army TACOM & U.S. D	DOD	American Defense Systems, Inc. Hicksville, NY	2008-03-10	Production of the HYEX, H100C, and ATLAS Crew Protection Kit (CPK)
HDTRA1-14-0003	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Defense Threat Reduction Agency	DOD	Anacor Pharmaceuticals Inc Palo Alto CA	2013-10-16	Overcoming Resistance by the Application of Boron to Ribosomal Inhibitors
HQ0147-14-C-7002	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Missile Defense Agency (MDA)	DOD	Applied DNA Sciences, Inc. Stony Brook, NY	2013-10-07	Marking of Components for Avoidance of Counterfeit Parts
HQ0147-14-C-8019	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Missile Defense Agency (MDA)	DOD	Applied DNA Sciences, Inc. Stony Brook, NY	2014-08-28	Anti-Counterfeiting Protection: Single Authentication Technology for Multiple High-Risk Commodities
N00178-03-C-1013	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	No	Naval Surface Warfare Center Dahlgren Division	DOD	ASI Technology Corporation Henderson, NV	2003-01-31	Plasma Phased Array Radar Antenna Architecture
W911NF-04-C-0035	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	US Army Robert Morris Acq CTR	DOD	Atmospheric Glow Technologies	2004-03-24	"Decontamination of Sensitive Material In a Chambered Atmospheric Plasma Decon System"
HDTRA1-10-C-0079	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Defense Threat Reduction Agency	DOD	Avi Biopharma. Corvallis, OR	2010-06-04	H1N1 Countermeasure Development. Human clinical evaluation of the safety of AVI BioPharma's lead compound as a
N00024-88-C-2050	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Naval Sea Systems Command	DOD	Avondale Industries, Inc. New Orleans, LA	1988-06-20	Design, construct, test, outfit, and deliver the Landing Ship Dock LSD 41 (Cargo Variant) (LSD 41 (CV)) ships fully outfi
DASG60-02-D-0009	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	DOD: USASDMC, PEO-AMD, and GMDJPO	DOD	BAE Systems, Huntsville,AL, and Paragon Systems, Inc.	2003-05-14	Coordinate all technology base development to maximize benefits for strategic and theater missile defense and air/spa
24852-POA-JA02-0001	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Pueblo Chemical Depot	DOD	Bechtel and CMS Field Products	2009-11-14	Pueblo Chemical Agent Destruction Pilot Plant Project
W911NF-08-C-0044	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Army ROECOM ACQ CTR	DOD	Bio Protection Systems Corporation	2008-05-08	Multiple Indication Adjuvants
W911NF-09-C0072	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	US Army Research Office	DOD	Bio Protection Systems Corporation	2009-07-31	"Improved Venezuelan Equine Encephalitis Virus Vaccines"
HDTRA1-09-C-0014	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Defense Threat Reduction Agency/Be-BC	DOD	Bio Protection Systems Corporation, Ames IA	2009-09-21	aGal adjuvant Technology for Biodefense Agents
W15P7T-10-D-D415	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	Yes	U.S. Army CECOM - Life Cycle Management Co	DOD	Booz Allen Hamilton Inc.	2012-11-01	This is a Subcontract that will be part of Booz Allen's Prime Contract W15P7T-10-D-D415 which has been issued by U.
FO4700-94-D-0011	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Air Force Flight Test Center	DOD	Cable TV Fund 12-C Ltd, Englewood, CO. & Jones Inter	1994-08-23	Construct, install, operate, and maintain a cable television system
W81XWH-15-C-0111	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	No	US Army Research ACQ	DOD	Cleveland Biolabs, Inc. Buffalo, NY	2015-09-01	Advanced Development of Entolimod (CBLB502) To Mitigate and Treat the Acute Effects of Ionizing Radiation
W91CRB-07-C-0093	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	US ARMY RDECOM ACQUISITION CENTER	DOD	CODA Octopus Inc., Saint Petersburg FL	2017-07-02	prototype Underwater Inspection Systems (UISS)
W911SR-05-C-0051	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	US Army RDECOM ACQ CTR.	DOD	Combimatrix Corporation, Mukilteo WA	2007-07-26	Development of a CMOS Microarray Platform for Bio and Chemical Threat Agent Detection
W911SR-08-C-0055	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	US ARMY RDECOM ACQ. CTR. - W911SR ED	DOD	Combimatrix Corporation, Mukilteo WA	2008-07-10	Reagentless Detection on a Semiconducto Microarray for the Immunochemical and Genomic Identification of Biothrea
W15P7T-07-D-1402	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	COMMANDER US ARMY CECOM, ACQ CENTI	DOD	Comtech Mobile Datacom, Germantown, MD	2007-08-31	For the continued operation, fielding, repair, improvement, and evolution of the L-band communications aspects of the
DAAD17-02-C-0073	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	US Army Robert Morris Acquisition Center	DOD	Cree Inc., Durham, NC	2002-02-01	The development of [***] is of critical importance to the military. [***] have application in biological agent detection, non-
N00014-02-C-0302	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Office of Naval Research	DOD	Cree Inc., Durham, NC	2002-06-28	Cree will develop [***] to meet the high demands of [***]. Program required to meet the overall goals of the Phase I DA
F41608-84-C-A100-PZ0050	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Air Force	DOD	CRSS Inc., HOUSTON TX	1984-05-16	Peace Shield Program
HM0210-10-C-0002	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Geospatial-Intelligence Agency (redacte	DOD	DigitalGlobal, Inc., Longmont, CO	2010-08-06	EnhancedView Imagery Acquisition
HM021013CN002	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Geospatial-Intelligence Agency	DOD	DigitalGlobal, Inc., Longmont, CO	2013-09-01	EnhancedView Imagery Acquisition
HM0210-13-C-N002	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Geospatial-Intelligence Agency (redacte	DOD	DigitalGlobal, Inc., Longmont, CO	2014-02-04	Satellite Imagery
HM021013CN002	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Geospatial-Intelligence Agency (redacte	DOD	DigitalGlobe, Inc. Westminster, CO	2013-07-30	Satellite Imagery
W52P1J-07-D-0007	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	HQ ARMY SUSTAINMENT COMMAND	DOD	DYNCORP INTERNATIONAL LLC	2007-06-27	Multi-functional logistics support on a global basis.
N00421-14-D-0025	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Naval Air Warfare Center AD-PAX	DOD	ERAPSCO (Joint venture between Sparton and Ultra Ele	2017-07-16	AN/SSQ-36B, AN/SSQ-53F, AN/SSQ-62E, and AN/SSQ-101A Sonobuoys in accordance with the PRODUCTION SON
N00421-11-C-0030	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Naval Air Warfare Center AD-PAX	DOD	ERAPSCO, Columbia City, IN	2011-04-08	AN/SSQ-36B, 53F, and 62E sonobuoys
FA4428-04-D-0013	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Air Mobility Command (HQ AMC/A34YA), Air Fc	DOD	Federal Express Charter Program, Memphis, TN.	2004-10-01	The Contractor shall perform International Airlift Services and CRAF Activation (when necessary) in accordance with th
HTC7118DCC37	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	United States Transportation Command/TCAQ-C	DOD	Federal Express Corp dba FedEx Memphis, TN	2018-09-24	Charter Airlift Services
N00019-96-D-2047	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Naval Air Systems Command	DOD	Flight International Group, Inc. Newport News, VA	1996-05-03	Obtain the services of aircraft, which are properly equipped, maintained, fueled, and operated by qualified contractor p
N00019-02-D-3157	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Naval Air Systems Command	DOD	Flight International Group, Inc. Newport News, VA	2002-03-28	Commercial Air Services - Military Operations Support (CAS-MOS)
M67854-11-C-5063	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	MARINE CORPS SYSTEMS COMMAND — MR	DOD	Force Protection Industries, Inc. Ladson, SC	2011-03-31	Buffalo A2 Mine Protected Clearance Vehicle (MPCV)
M67854-07-D-5031	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Marine Corps (DOD - Navy)	DOD	Force Protection Industries, Inc., General Dynamics Lan	2007-09-06	Revenue Management/Invoicing Services in support of Prime Contract M67854-07-D-5031
N62645-12-C-4079	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	No	Naval Medical Research Center	DOD	GenVec, Inc. Gaithersburg, MD	2012-09-29	Manufacture of Three Adenovirus Vectors Encoding Plasmodium falciparum Sporozoite/Liver Stage Antigens with Stat
HM0210-10-9-0001	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	National Geospatial-Intelligence Agency	DOD	GeoEye Imagery Collection Systems, Inc, Dulles, Virginia	2010-06-08	The objectives of this OTFPP Agreement are to carry out prototyping, demonstrations, evaluations, and development o
N00167-99-C-0002	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Naval Surface Warfare Center	DOD	H. Power Corp.	1998-10-27	Development of a High Performance 2 kW.Fuel Cell/Multi-fuel Reformer System
N62678-02-D-2006	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Norfolk Naval Shipyard.	DOD	Herc Products, Inc. Portsmouth, VA	2002-09-20	Chemical Cleaning of Sewage Piping
MDA906-03-C-0010/P00814	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	DOD Tricare Management Activity	DOD	Humana Military Healthcare Services, Inc. Louisville KY	2011-01-06	Health care services
HT9402-11-C-0003	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	DOD Tricare Management Activity	DOD	Humana Military Healthcare Services, Louisville KY	2011-03-03	The purpose of this contract is to provide Managed Care Support (MCS) to the Department of Defense (DoD) TRICAR
HC1047-14-C-4000	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	DISA/DITCO-NCR/PL64	DOD	Iridium Satellite LLC McLean, VA	2013-10-18	This contract provides DOD/USG with a global satellite communication services for handset, pager, Subscriber Identif
N00174-03-D-0003	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Naval Sea Systems Command, Indian Head	DOD	Irobot Corp. Milford, NH	2002-05-08	MAN TRANSPORTABLE ROBOTIC SYSTEM
NR0000-03-C-0139	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Reconnaissance Office (NRO)	DOD	Irvine Sensors Corporation	2003-04-01	Large Area Mosaic Focal Plan Array
MDA972-03-C-0052	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	DARPA	DOD	Irvine Sensors Corporation	2003-04-21	Wearable Data Recorder
W15P7T-04-C-P001	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Commander US ARMY CECOM, ACQ CENTER	DOD	Irvine Sensors Corporation	2003-10-30	Design, build, characterize and deliver a low noise, low power, high performance uncooled micro-camera for active ima
W911NF-06-C-0027	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Army ROECOM ACQ CTR	DOD	JMAR Research, San Diego	2005-11-10	Multipulse Agile Laser Source for Real-Time Spark Spectrochemical Hazard Analysis in the Field
MDA904-97-C-0424	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Missile Defense Agency (MDA), Fort Meade	DOD	Litronic Inc. Irvine, CA	1997-06-27	Multi-Level Information System Security Initiative Crypto Card System Analysis and Library and Driver Architecture and
No ID.	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	U.S. Army Medical Research Institute of Infectio	DOD	Manhattan Torcon A Joint Venture and IES Commercial,	2009-07-09	Construction
W911QY20C0100	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Army. ACC-APG NATICK	DOD	Modematx Inc, Cambridge, MA	2020-08-11	SARS-CoV-2 mRNA-1273 Vaccine doses (100 ug) in support of Joint Program Executive Office - Chemical Biological F

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Contract, PO, etc ID	URL	FAR 52.227-1	FAR 52.227-2	FAR 52.227-3 / 52.227-4	Government party	Dept or Agency	Private party	Date	Notes
W81XWH-15-C-0096	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	USAMMA, the U.S. Army Medical Materiel Deve	DOD	NeuroHabilitation Corporation, Newtown, PA	2015-07-01	The U.S. Army is supporting an effort to develop NeuroHabilitation Corporation's (NHC) Portable Neuromodulation Stin
F11626-03-D-0024	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Air Mobility Command (HQ AMC)	DOD	North American Airlines Contractor team, Sterling, VA	2003-10-01	Performing International Airlift Services and CRAF Activation
W911QY 20C00077	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	U.S. Army. ACC-APG NATICK	DOD	Novavax Inc.	2020-06-08	Novavax nanoparticle vaccine against COVID-19
W911GX-09-C-0114	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	US ARMY RDECOM CONTRACTING CENTER	DOD	Nugen Mobility, Ashburn, VA	2009-09-25	Innovative Motor and Generator Technology
N65538-10-C-0007	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Naval Sea Logistics Center	DOD	Nugen Mobility, Ashburn, VA	2010-07-09	ADVANCED MARINE GENERATOR FOR COMBATANT CRAFT
DAAE07-94-C-0406	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Army Tank Automotive Command ("TACOM	DOD	O'Gara-Hess & Eisenhardt Armoring Company, Fairfield,	1994-05-12	M1097A1 High Mobility Multi-Purpose Wheeled Vehicle, (HMMWV)
N00014-05-C-0384	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Office of Naval Research	DOD	Ocean Power Technologies	2005-09-20	advanced WEC system for Hawaii
N00014-05-C-0384	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Office of Naval Research	DOD	Ocean Power Technologies	2007-09-26	Design, procure and build a pod cable management system for the low-voltage (LV) cable section to provide an improv
N000014-09-C-0115	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Office of Naval Research	DOD	Ocean Power Technologies	2008-10-31	DWADS Advanced Development Model (ADM) PowerBuoy
W52H09-05-R-0051	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Army TACOM- Rock Island Arsenal Joint M	DOD	Oplex Systems, Inc.	2005-06-02	M137A2 and M137A3 Panoramic Telescope
W52H09-05-R-0050	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Army Tank-Automotive & Armaments Comn	DOD	Oplex Systems, Inc. Richardson, TX	2005-07-27	M187A1 Mount Telescope
W52H09-08-R-0274	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	U.S. Army TACOM LCMC (Rock Island)	DOD	Oplex Systems, Inc. Richardson, TX	2008-09-05	Procurement of Periscope parts
SPRDLI-12-C-0023	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	DLA Land Warren, Defense Logistics Agency	DOD	Oplex Systems, Inc. Richardson, TX	2011-10-24	Confidential scope of work, but for the line of business, see: <a href="https://www.sec.gov/Archives/edgar/data/1397016/000114">https://www.sec.gov/Archives/edgar/data/1397016/000114</a>
W81XWH-06-C-0024	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Army Medical Research Acquisition Activity	DOD	Quick-Med Technologies Inc Gainesville FL	2005-11-07	Chemical Casualty Care: Wound Dressings Designed to Speed Wound Closure Following Debridement of Cutaneous W
W911QY-12-C-0117	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ACC-APG Naatick Division	DOD	Sarepta Therapeutics	2012-08-28	IM Formulation Feasibility Study, counter measure to the marburgvirus threat
MDA904-93-C-C034	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Defense Contract Management Agency	DOD	Secure Computing Corp, Roseville, MN	1992-12-16	Secure Network Server (SNS) Guard, Development Program
DAAE07-02-D-T001	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Army TACOM AMSTA-LC-CJEA	DOD	SFA Inc Frederick, MD	2002-02-06	Tactical Water Purification System (TWPS)
W911QY-05-D-0004	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	US Army	DOD	SFA Inc Frederick, MD	2005-04-14	Fabrication, test, and delivery of Containerised Kitchen (CK) with trailer. CK program was initiated to design, fabricate,
SP4701-10-C-0008	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	NO	Defense Logistics Agency	DOD	Solazyme, Inc. South San Francisco, CA	2010-09-10	Develop and demonstrate production of renewable F-76 Naval Distillate fuel at a scale that enables [*] testing.
W15PT7-13-C-D519	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ARMY CONTRACTING CMD-APG	DOD	Technical Communications Corporation, Concord, MA	2013-05-02	Foreign Military Sale (FMS) requirement for the country of Egypt, under FMS CASE EG-B-UZE. The purpose of this co
W9113M-10-C-0057	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Army. USASMDC/ARSTRAT	DOD	tekmira Pharmaceuticals Corp. Frederick MD	2010-07-14	for the Advanced Development through licensure of a Hemorrhagic Fever Virus Therapeutic.
HDTRA1-10-C-0004	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Defense Threat Reduction Agency	DOD	TRIOUS THERAPEUTICS, INC. SAN DIEGO CA	2010-04-19	Broad Spectrum Antibacterial Therapeutics from Marine Natural products
N00033-07-C-5416	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Military Sealift Command, N1033/PM5 (Naval)	DOD	US Product Carriers LLC	2007-07-07	Charter of military vessels
N00039-10-D-0032	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Commander, Space and Naval Warfare (Naval)	DOD	Viasat, Inc. Carlsbad, CA	2010-03-10	MIDS LVT
F19628-95-C-0149	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Electronic Systems Center, Air Force Materiel C	DOD	Viasat, Inc. Carlsbad, CA,	1995-10-02	Design, fabricate, integrate, test, and deliver 5-KHz Initial Network Control Station.
F11626-94-D0027	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Department of Defense	DOD	Worldcorp, Inc. Herdon, VA	1994-10-01	International long and/or short-range airlift services.
DE-FC26-06NT42774	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S Department of Energy	DOE	ADA-ES, Inc. Littleton, CO	2006-05-01	Long-Term Carbon Injection Field Test for >90% Mercury Removal for a PRB Unit with a Spray Drier and Fabric Filter
89303519CNE000005	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	EM-OAK Ridge EMCBC (Department of Energy)	DOE	American Centeruge Operating, LLC, Bethesda MD	2019-05-31	High Assay Low Enriched Uranium (HALEU) Demonstration Project
DE-NE0008472	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	U.S. Department of Energy, Nuclear Energy Hea	DOE	American Centrifuge Operating, LLC	2019-06-01	High Assay Low Enriched Uranium (HALEU) Demonstration Project, see: <a href="https://www.sec.gov/Archives/edgar/data/106">https://www.sec.gov/Archives/edgar/data/106</a>
DE-EE0002869	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Department of Energy	DOE	Amryris Biotechnologies, Inc. Emeryville, CA.	2009-12-30	SCALE-UP & MOBILIZATION OF RENEWABLE DIESEL & CHEMICAL PRODUCTION FROM COMMON INTERMED
DE-NE0000583	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S. Department of Energy Oak Ridge Financial	DOE	Babcock & Wilcox, mPower, Inc. Charlotte, Inc. (Gener	2013-04-12	mPower America: Design, License, & Certification of mPower Small Modular Reactor
No ID	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Not identified	DOE	Chevron and Brightsource Construction	2008-12-17	Solar-to-Steam Demonstration Plant
DE-FC36-08GO18103	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	U.S Department of Energy	DOE	Mascoma Corporation, Boston, MA	2009-03-27	Demonstration of Integrated Biorefinery
89233218CNA000001	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	yes	National Nuclear Security Administration (NNSA,	DOE	Triad National Security, LLC Los Alamos, NM, PermaFix	2019-08-21	University of Washington, Maleng Medical Facility Filter Replacement Project to include Rooftop Filters and Operating I
89233218CNA000001	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	No	National Nuclear Security Administration (NNSA,	DOE	Triad National Security, LLC Los Alamos, NM, PermaFix	2020-02-23	University of Washington (UW) Harborview Research & Training (R&T) Facility Surveys, Remediation, Decommissionin
HHSO100201000046C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	BARDA	HHS	Achaogen Inc San Francisco, CA & Hovione Limited Co	2017-03-05	Manufacture the active pharmaceutical ingredient "Plazomicin",
HHSO100201000046C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ASPR-BARDA	HHS	Achaogen Inc, South San Francisco, CA	2010-08-30	The purpose of the contract is for the development of a novel, Broad Spectrum "Neoglycoside" Antibiotic for the treatm
75N91019C00042	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Cancer Institute (NCI,NIH)	HHS	Aethlon Medical, Inc. San Diego, CA	2019-09-12	Prototype for isolation of melanoma exosomes for diagnostics and treatment monitoring
HHSO100201600008C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	Altimmune, Gaithersburg, MD	2016-07-27	Advance the development of AdVAV as a novel, intranasally administered vaccine for use in protection against anthrax
HHSN266200600019C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Institute of Health (NIH) National Institut	HHS	Argos Therapeutics, Inc. Durham, North Carolina	2006-09-28	The goal is to design, develop and clinically test an autologous HIV vaccine capable of eliciting therapeutic immune res
HHSO100201500028C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	AVITA Medical Americans LLC Northridge CA	2015-09-20	Autograft-Sparing Products for Definitive Care of Burn Injuries
HHSO100200700034C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR/BARDA	HHS	Bavarian Nordic A/S, Denmark	2007-06-04	for the acquisition of 20 million doses (in single-dose vials) of MVA vaccine for the Strategic National Stockpile.
HHSO100201000011C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ASPR/BARDA	HHS	Bavarian Nordic A/S, Denmark	2009-11-16	Statement of work is redacted
HHSO100201000046C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	BARDA	HHS	Between Achaogen and Ark Diagnostics	2013-08-19	Develop Assay in support of ACHN-490 or plazomicin, is a novel aminoglycoside antibiotic.
HHSO100200700032C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	HHS/OS/OPHEP/OPHEMC	HHS	BioCryst Pharmaceuticals, Durham, NC	2006-12-08	Advanced development of prophylactic and therapeutic drugs against pandemic and seasonal influenza viral pathogen
HHSO100201000001	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ASPR-BARDA	HHS	BioCryst Pharmaceuticals, Durham, NC	2009-11-04	Antiviral treatments for H1N1 pandemic threat
HHSN272201300017C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Institute of Health (NIH) National Institut	HHS	BioCryst Pharmaceuticals, Durham, NC	2013-09-13	BCX4430
HHSO100201500007C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Office of Acquisitions Management, Contracts, a	HHS	BioCryst Pharmaceuticals, Durham, NC	2015-03-31	BioCryst's proposal focuses on BCX4430, a novel small molecule nucleoside with broad spectrum antiviral activity bein
HHSO100201700007C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ASPR-BARDA	HHS	Biodefense Operations Lansing LLC	2017-03-16	For manufacturing BioThrax.
HHSO100201300009C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Office of Acquisitions Management, Contracts, a	HHS	Cempra, Inc Chapel Hill, NC	2013-04-17	For the development of Solithromycin (CEM-101), a novel fluoroketolide antibiotic of the macrolide class for the treatm
HHSO100201100013C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Office of Acquisitions Management, Contracts, a	HHS	Chimerix, Inc., Durham, NC	2011-02-16	For the development of CMX001 for the Treatment of Smallpox
75A0121C00021	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ASPR-BARDA	HHS	Contractect Corp, Yonkers, NY	2021-03-10	Advance the development of exebacase (CF-301) as a new anti-staphylococcal treatment modality (direct lytic agent).
HHSO100201200002C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ASPR-BARDA	HHS	CUBRC, Inc. Buffalo, NY	2012-02-01	Development of TP-434 for Treatment of Select Bacterial Infections
HHSN272201100028C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Institute of Allergy and Infectious Disea	HHS	CUBRC, Inc. Buffalo, NY	2011-09-30	Development of Novel Tetracycline Countermeasures for Respiratory Disease Caused by Biothreat and Antibiotic-Resi
HHSM-500-2009-00005C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	Yes	CMS, OAGM, MCG, DMSC	HHS	Diversified Collection Services, Inc. Livermore CA	2003-10-03	Recovery Audit Contractor Program
HHSO1002012000041	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	Yes	ASPR-BARDA	HHS	Emergent Manufacturing Operations Baltimore LLC, Lo	2020-04-02	Development of Covid-19 therapeutics
75A50120F33007	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	Yes	ASPR-BARDA	HHS	Emergent Manufacturing	2020-05-24	Pharmaceutical Manufacturing Capacity Expansion
HHSO1002012000041	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	Emergent Manufacturing Operations Baltimore	2012-06-15	Expand U.S.-based biopharmaceutical manufacturing surge capacity through the awarding of multiple cost sharing con
HHSO1002012000041	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	Yes	ASPR-BARDA	HHS	Emergent Manufacturing Operations Baltimore	2020-08-06	Reserve the capacities and capabilities at Contractor's Bayview CIADM facility.
HHSO100201600030C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	Emergent Product Development	2021-09-29	\$198 million, original contract Sept 30, 2016
HHSO100201600030C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	Emergent Product Development Gaithersburg Inc.	2016-09-30	developing NuThrax vaccine as a next generation anthrax vaccine.
HHSN272201100029C	<a href="https://www.sec.gov">https://www.sec.gov</a>	yes	Yes	No	National Institute of Health (NIH) National Institut	HHS	Enanta Pharmaceuticals, Watertown, MA	2011-09-27	Develop EDP-788, a prodrg of EDP- 322 with enhanced bioavailability and water solubility, for oral and intravenous ac

Table 3: SEC-1498-contracts

Contract, PO, etc ID	URL	FAR 52.227-1	FAR 52.227-2	FAR 52.227-3 / 52.227-4	Government party	Dept or Agency	Private party	Date	Notes
HHSN 261201200073C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Cancer Institute (NCI,NIH)	HHS	Enumeral Biomedical Corporation	2012-08-15	Characterize Enumeral's technology for the * on clinical samples and to * to be used in Phase II. Enumeral's platform is
HHSN261201400048C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Cancer Institute (NCI,NIH)	HHS	Enumeral Biomedical Corporation	2014-09-16	Development of enumeral platform for early cancer diagnosis
75N92020C00009	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	Yes	National Institute of Biomedical Imaging and Bio	HHS	Fluidigm Corporation	2020-07-30	COVID, Rapid Acceleration of Diagnostics Advanced Technology Platforms (RADx-ATP) to increase the testing capaci
HHSO100200500006C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	DHSS/OS/OPHEP/ORDC	HHS	Human Genome Sciences Inc Rockville MD	2005-09-23	Anthrax therapeutic products to treat United States (US) civilians with inhalational anthrax disease
HHSO100200700031C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	HHS/OS/OPHEP/OPHEMC	HHS	Iomai, Gaithersburg, MD	2007-01-17	Support advanced stage development of enhanced immunity and/or antigen-sparing strategies for pandemic influenza
HHSN261201300060C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Cancer Institute (NCI,NIH)	HHS	MabVax Therapeutics, Inc.	2013-08-23	Development of its novel pancreatic cancer PET imaging agent
75A50120C00159	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	Marinus Pharmaceuticals, Radnor, PA	2020-09-08	Development of Ganaxolone
HHSO100201500035C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	Mediound LTD	2015-09-29	Non-Surgical Debridement for Definitive Care of Burn Injuries
HHSO100201800023C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	Mediound LTD. Yavne, Israel	2018-09-30	or a potential 8-year product development plan to achieve the licensing of NexoBrid as a MCM for Sulfur Mustard (SM
HHSO100201000046C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ASPR-BARDA	HHS	Microgenics Corporation, Fremont, California & Achaoge	2016-04-26	Development of plazomicin including an assay
75A50120C00034	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ASPR-BARDA	HHS	Modematx Inc, Cambridge, MA	0202-09-14	Development of an mRNA vaccine for SARS-CoV-2
HHSO100201100012C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ASPR-BARDA	HHS	Novavax Inc.	2011-02-24	Advanced development of recombinant seasonal and pandemic-like influenza vaccines utilizing hemagglutinin genes o
HHSO100201800029C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	Opiant Pharmaceuticals, Inc.	2018-09-19	Development of a Rapid Acting, Long Duration Intranasal Antagonist to Reverse Opioid (e.g. Fentanyl Overdose)
HHSO100201000045C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	OMCG, BARDA	HHS	Pfenex Biopharmaceuticals	2010-07-30	Development of rPA using Pfenex Expression Technology
HHSN272201200033C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Institute of Health (NIH) National Institut	HHS	Pfenex Inc San Diego CA	2012-09-27	Support the advanced development of candidate vaccine components and technologies that accelerate the immune res
NO-A1-30052	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Institute of Health and BARDA	HHS	PharmaAthene, Annapolis, MD, and Disynth RTP Inc. Mo	2009-09-17	Anthrax vaccine. Technology Transfer. Scale-Up and cGMP Manufacturing of rPA Drug Substance
HHSN272201400040C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Institute of Health (NIH) National Institut	HHS	PharmAthene, Inc. Annapolis, MD	2014-09-09	Development of Vaccine Formulations Effective Against NIAID Priority Pathogens
200-2018-96379	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Centers for Disease Control and Prevention (CD	HHS	Precision Opinion and National Opinion Research Cente	2018-01-01	Conduct interviews and research services for NORC ("Research Services") comprised of administering research surve
200-2012-51130	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Centers for Disease Control and Prevention (CD	HHS	Precision Opinion, National Opinion Research Center	2012-07-25	National Immunization Survey, Subcontract NO. 7400.Precision Opinion.01,
HHSN261200800001E	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	No	National Cancer Institute (NCI,NIH)	HHS	SAIC-Frederick, Inc. (SAIC) and GenVec, Inc.	2009-11-01	Provide the necessary goods and services to the National Institute of Allergies and Infectious Diseases (NIAID) for the
HHSN272200700060C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Office of Acquisitions, DEA, National Institute of	HHS	SeraCare BioServices, Gaithersburg, MD	2007-09-30	The purpose of this contract is the continuation of an ongoing specimen storage and management program for HIV ser
HHSN261201480013C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Cancer Institute (NCI,NIH)	HHS	Shuttle Pharmaceuticals, LLC	2014-09-19	Oral IPdR as a radiation sensitizer for use in cancer treatment. *This contract incorporates the following clauses by ref
HHSN261201600038C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	National Cancer Institute (NCI,NIH)	HHS	Shuttle Pharmaceuticals LLC, Rockville, MD	2016-09-29	In this Phase I project the objectives are to develop and annotate AA prostate epithelial cancer cell line with donor mat
HHSO100201100001C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	OMCG, BARDA	HHS	Siga Technologies, NY, NY	2011-05-13	1,700,000 treatment courses of smallpox antiviral Final Drug Product (FDP) that can be delivered to the Centers for Dis
HHSO100201800019C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	Siga Technologies, NY, NY	2018-09-10	Statement of work [redacted]* But press release says for the delivery of oral and intravenous (IV) formulations of TPOX
HHSN272201400039C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	NIH, NIAID	HHS	Soligenix, Inc, Princeton, NJ	2014-08-18	Solid vaccine formulations, for NIAID Category A, B and C Priority Pathogens or in response to naturally occurring out
HHSN272201300030-C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	NIH, NIAID	HHS	Soligenix	2013-09-30	OrbeShield will be evaluated as a MCM for Gastrointestinal-Acute Radiation Syndrome (GI-ARS).
HHSO100201300023C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	OMCG, BARDA	HHS	Soligenix, Princeton, NJ	2013-08-22	OrbeShield development as a medical countermeasure for GI ARS
HHSO10020180015C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	Spero Therapeutics, Inc. Cambridge, MA	2018-07-12	development of SPR994 for the treatment of Drug Restraint Gram-negative Bacterial Infections
HHSO100201700014C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	Summit (Oxford) Limited	2017-09-05	Development of Ridinilazole, a novel narrow spectrum antimicrobial, drug with proven utility against infections caused t
75A50119C00053	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	ASPR-BARDA	HHS	T2 Biosystems Inc. Lexington MA	2019-09-05	Rapid, high-throughput, multiplexed detection of biothreat species ID and resistance genes using T2MR
Mod of letter contract	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	Yes	NIH/NHLBI	HHS	Talis Biomedical Corporation, Menlo Park, CA	2020-07-30	Highly scalable LAMP-based testing instrument (Talis One) for SARS-CoV-2 RNA detection, suited to the protection of
HHSO100201500018C	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	ASPR-BARDA	HHS	Visterra, Inc. Cambridge MA	2015-09-28	Objective is to achieve US licensure for VIS410, a fully human IgG1 antibody directed against the HA protein of the inf
NAS-20590	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	NASA	NASA	Ballistic Recovery Systems, Inc. St Paul, MN	1996-03-06	LOW COST, LIGHTWEIGHT AIRCRAFT EMERGENCY RECOVERY SYSTEM
NAS10-98001	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	NASA, John F. Kennedy Space Center	NASA	Dynacs Inc. palm Harbor, FL	1997-10-01	Engineering work
80NSSC18P2229	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	NASA	NASA	Hypersciences, Spokane, WA	2018-07-25	Low Cost Nano and Micro Satellite Launch Stage and Automated Hypersonic Test Platform
NAS5-02129	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	NASA, Goddard Space Flight Center	NASA	Irvine Sensors Corporation	2002-09-10	Small Business Innovative Research (SBIR) Program Phase II Research Project
No ID	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	No	Not identified	Not identified	Computer Sciences Corporation and Computer Sciences	2015-11-01	Sets out procedures for addressing intellectual property rights
No ID	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	No	No	Several	Not identified	SAIC (now known as Leidos) and SAIC Gemini	2013-09-25	Master Transitional Contracting Agreement
No ID.	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Not identified	Not identified	Soletron Corporation Milpitas, CA & Trimble Navigation	2005-10-24	This document is intended to identify and reach agreements on [***] needs in doing business with Soletron Suzhou, C
No ID	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	No	Federal Employees Health Benefits (FEHB) Proc	OPM	Wellpoint, Express Scripts	2009-12-01	Support WellPoint Government Services/Medicare Part D and Medicaid Administration.
0440-97-29984	<a href="https://www.sec.gov">https://www.sec.gov</a>	Yes	Yes	Yes	Social Security Administration	SSA	Dunn Computer Corp, Sterling, VA	1995-04-14	Computer and software equipment