THE VIENNA CONVENTION
ON THE ASSIGNMENT
OF
RECEIVABLES IN INTERNATIONAL TRADE

The Committee on Foreign and Comparative Law
of
The Association of the Bar of the City of New York

December 21, 2001
I. INTRODUCTION

It is common in the United States and a few other countries for companies to obtain credit by assigning their accounts receivable, but outside of those countries accounts receivable financing is relatively rare. This is unfortunate, because this form of financing is particularly suited to the needs of lesser developed countries. By allowing a borrower to obtain credit based on the creditworthiness of the borrower’s customers, rather than the borrower’s own creditworthiness, such financing can have the beneficial effect of providing to small companies credit at lower interest rates and credit which might otherwise not be available.

In July of 2001, the United Nations Commission on International Trade Law (“UNCITRAL”) formally approved the Draft Convention on the Assignment of Receivables in International Trade (the “Convention”). The Convention, drafted over the course of six years by a working group (the “Working Group”) consisting of representatives from more than seventy countries and thirty international organizations, introduces the fundamental concepts of receivables financing into international commercial law.

The Convention does not purport to constitute a complete system for accounts receivable financing. In particular, a lack of consensus on such fundamental issues as the priority of competing claims to an assignment forced the Working Group to fall back on choice of law rules with respect to several crucial concepts. Nevertheless, the Convention internationalizes a number of important issues and builds a foundation for future development in this area of law. For the reasons set forth below, the Committee on Foreign and Comparative Law of the Association of the Bar of the City of New York believes that the Convention on the Assignment of Receivables in International Trade will benefit all participants, both lenders and borrowers, in international financial transactions, resulting in an increase in the amount of credit available, a decrease in the level of risk, a reduction in interest rates and, ultimately, increased economic activity. The Committee, therefore, recommends that the Convention receive the full support of the United States, that the President sign the Convention and that the Senate vote to ratify it. In addition, the Committee recommends that the United States adopt those portions of the Annex to the Convention relevant to the implementation of an international registration system.

This report begins by discussing the social benefits of accounts receivable financing. It then summarizes the terms of the Convention, which is followed by a discussion of how the Convention affects existing international law. The report then briefly considers the impact of the Convention on U.S. law and business.

II. ACCOUNTS RECEIVABLE FINANCING AND THE “LAVA LAMP” SOCIETY

The American legend of the penniless immigrant or the poor farm boy who rises to command a business empire has a solid basis in history. Whatever problems the United States faces, a rigid class structure is not one of them. U.S. society can be compared to a lava lamp1/, with those on top

---

1/ Lava lamps were a popular home lighting fixture used in the 1960s. A globe or tube filled with
sinking and those on the bottom rising to replace them. The United States experiences remarkable mobility between the wealthiest and the poorest segments of society. Several studies have found that 60% of all Americans move into a different income quintile within nine years. A study at the University of Michigan concluded that 29% of everyone in the lowest income quintile in 1975 had moved into the highest quintile by 1991.

There are both economic and social benefits to such economic mobility. It employs a country’s resources in a more efficient manner, and therefore maximizes wealth, because the system both penalizes failure and rewards success. Economic mobility also serves a social purpose, reducing hubris in the rich and despair in the poor.

There are many reasons for the lava lamp society. A sound legal system, stable political regime and respect for the rule of law all allow class mobility to take place. Business regulation, which often serves to prevent class mobility, is not as extensive in the United States as it is elsewhere. Also, without an aristocracy, America has always looked up to its business leaders and scientists as role models. Further, ever since the earliest colonization of North America, life in the New World was premised on advancement. The dream of getting ahead in America itself creates the demand for opportunity and the expectation of success.

Within the realm of business and finance, one of the more effective means of creating a porous class structure is so common in the U.S. that it is taken for granted. Accounts receivable financing allows a company with no credit history to obtain capital on the basis of its customers’ credit histories. By using accounts receivable financing, a company can obtain capital either by selling obligations owed to it outright (a process which is often called “factoring”) or by pledging such obligations as collateral for a loan. By allowing a start-up company to obtain credit by using the credit of its richer, established customers, receivables financing can bootstrap poorer entities into economic success.

Economic historians have found evidence to suggest that some form of factoring existed 4,000 years ago, in Mesopotomia. The assignment of a debt has been found among the records of ancient Rome. The first widespread use of receivables financing occurred in the trans-Atlantic trade in the 18th Century, although it more closely resembled advance payment for goods than what we know today as receivables financing.

colored water and wax rested on a light bulb. The heat from the bulb warmed the wax, causing droplets of it to float to the top of the globe, whereupon the droplets would cool off and sink to the bottom to repeat the process. This caused a dynamic system in the lamp whereby droplets of wax were constantly rising and falling in the body of colored water.
Modern factoring began in the United States about 100 years ago and for some time was used primarily in the textile and garment trades. Using receivables as collateral for loans is a more recent phenomenon, although by the 1930's this also had become an accepted financing practice. In that decade, Daniel K. Ludwig, at one time the only billionaire in America, built up a large fleet of ships by securing a loan to build one ship with a pledge of the receipts of an existing ship. Today, factoring alone is an $80 billion business and receivables financing in general is larger still.

Despite the phenomenal success of receivables financing in America, the rest of the world has been slow to follow. Most countries lack a legal regime that can accommodate receivables financing. Factoring was introduced to the United Kingdom in about 1960. Continental Europe adopted it thereafter, although European countries other than the United Kingdom still do not have a system which allows third parties to independently verify that receivables have not been pledged. The uncertainty this causes hinders the growth of the practice. A few other countries, including Mexico, have made efforts to accommodate receivables financing, but in general, outside of a few common law countries, the use of receivables as collateral continues to lag.

Many of the legal devices which practitioners in the U.S. deem crucial for a fully functioning market in receivables do not exist in the rest of the world. The assignment of bulk and future receivables and the existence of a regulated filing system or an alternative system which would allow third parties to determine whether there are other claimants to the same receivable are all alien concepts in most of the world, including most developed countries.

Receivables financing is, therefore, a great untapped resource. The bulk of exports in the developing world consists of natural resources and manufactured goods, two categories of products to which receivables financing is ideally suited. Receivables financing has enormous potential for increasing the availability of credit, enhancing the functioning of international trade and, more generally, improving the lot of mankind.

It is with this in mind that UNCITRAL in 1995 convened a Working Group to draft a convention to address these issues. The Working Group met annually for four weeks a year, two weeks (usually in the spring) in New York and two weeks (usually in the fall) in Vienna. The initial draft, providing for an international registry system and priority rules based on “first to file” principles, proved to be too ambitious to obtain the approval of countries representing so many different legal and financial traditions, and the Working Group had to reach compromises on many important issues. Nevertheless, as ultimately drafted, the Convention made significant strides toward establishing receivables financing as a worldwide financing technique.

III. SUMMARY OF THE CONVENTION

The Convention consists of 47 articles grouped into six chapters, together with a Preamble and an Annex comprised of ten articles in four sections. The Convention defines a receivable as “a contractual right to payment of a monetary sum” from a third person (the “debtor”). An “assignor” is one transferring a receivable by agreement (the “assignment”) and the “assignee” is the one to
whom it is transferred. A country which has adopted the Convention is a “Contracting State.” This report will use these terms as so defined.

A. Preamble

The goals of the Convention set forth in the Preamble are to create certainty and transparency and promote the modernization of the law relating to assignments of receivables, while protecting the interests of the debtor. By adopting clear, uniform rules governing receivable assignments, the Working Group expects increased credit availability in world markets at lower interest rates.

B. Scope of Application (Chapter I)

This Chapter, comprising Articles 1 through 4 of the Convention, enumerates the types of transactions subject to the Convention.

The Convention applies to both assignments of international receivables (i.e., receivables between a debtor and an assignor which are located in different States, regardless of the location of the assignee) and international assignments of receivables (i.e., assignments between an assignor and an assignee who are located in different States, regardless of the location of the debtor) if, at the time the assignment is concluded, the assignor is located in a Contracting State. Once a receivable becomes subject to the Convention, all subsequent assignments of that receivable are also subject to the Convention (Article 1(1)(a)), even if the Convention did not apply to prior assignments of such receivable (Article 1(1)(b)). The Convention does not affect the rights and obligations of the debtor unless, at the time of the conclusion of the original contract evidencing the receivable, the debtor is located in a Contracting State or such contract is governed by the law of a Contracting State (Article 1(3)). A person is located in the State in which it has a place of business; if it does not have a place of business, its location is the habitual residence of that person (Article 5(h)).

Certain types of receivables and assignments are excluded from the Convention, including assignments made (i) to an individual for personal, family or household purposes or (ii) as part of the sale of a business (Article 4(1)). The Convention also does not apply to assignments of receivables arising under:

(a) transactions on a regulated exchange;
(b) financial contracts governed by netting agreements, except a receivable owed on the termination of all outstanding transactions;
(c) foreign exchange transactions;
(d) inter-bank payment systems, inter-bank payment agreements or clearance and settlement systems relating to securities or other financial assets or instruments;
(e) the transfer of security rights in, sale, loan or holding of or agreement to repurchase securities or other financial assets or instruments held with an intermediary;
(f) bank deposits; and
(g) a letter of credit or independent guarantee.
The Convention also does not affect (i) rights and obligations of a person under the law governing negotiable instruments (Article 4(3)) or under special laws governing the protection of parties to transactions made for personal, family or household purposes (Article 4(4)) or (ii) the application of a State’s real property laws with respect to certain rules relating to security interests under such laws.

C. General Provisions (Chapter II)

The articles in this Chapter, Articles 5 through 7, provide definitions and general rules of interpretation. Of note in these articles is the presumption of party autonomy: an assignor, assignee and debtor can agree to vary from the Convention, but any such agreement is invalid as to third parties who are not party to such agreement (Article 6).

D. Effects of Assignment (Chapter III)

This Chapter, consisting of Articles 8 through 10, sets forth certain rules governing the assignment itself.

Article 8 recognizes the validity of bulk assignments of receivables, assignments of future receivables and assignments of a portion of or an undivided interest in receivables, provided that, in each case, the receivables are described sufficiently enough to be identifiable. Article 9 provides that anti-assignment clauses in contracts evidencing certain types of trade receivables (these consist of four categories: (i) trade receivables, other than those arising from financial services, construction or real estate contracts, (ii) receivables arising from intellectual property transactions, (iii) credit card receivables and (iv) receivables arising from multi-party netting agreements) are not enforceable against the assignee, but this provision does not affect the rights of the debtor against the assignor.

Article 10 sets forth rules relating to receivables secured by collateral. Article 10(1) provides that a personal or property right securing payment of an assigned receivable accompanies the receivable without a new act of transfer, but if a law governing such right requires a new act of transfer the assignor is obliged to transfer such right. Articles 10(2) and 10(3) provide that the anti-assignment clauses invalidated with respect to receivables under Article 9 also are invalidated with respect to such property rights.

E. Rights, Obligations and Defenses (Chapter IV)

This Chapter, Articles 11 through 25, is subdivided into three sections, setting forth the rules governing (i) the relationship between assignor and assignee, (ii) the debtor and (iii) third parties.

1. Assignor and Assignee

The Convention recognizes that the mutual rights and obligations of the assignor and assignee determined by the agreement between them include usages established between them and usages widely known in international trade (Article 11). In the absence of agreement to the contrary,
the assignor is held to have represented to the assignee that the assignor has the right to assign a receivable, that the assignor has not previously assigned it and that the debtor owing such receivable does not have any defenses or set-off rights. The assignor does not represent that the debtor has the ability to pay the amount outstanding (Article 12). Thus, the assignor does not represent as to the creditworthiness of the assignee, but only as to the existing contractual relationship between the debtor and assignor.

Article 13 establishes the right, as between the assignor and the assignee, to send notification of an assignment and payment instructions to the debtor owing the subject receivable. Article 14 provides for the supremacy of an assignee’s right to receive proceeds and returned goods over that of the assignor or another person with a subordinate claim, regardless of who actually received the proceeds and returned goods.

2. **Debtor**

Articles 15 through 21 set forth the rights and obligations of the debtor.

Although a payment instruction sent to a debtor in connection with an assignment may change the person, address or account to which payment must be sent, it cannot change the currency of payment or the State specified in the original contract in which payment is to be made (except to the debtor’s own State) (Article 15). Article 16 sets standards for the proper notification to a debtor of an assignment, including requiring that it be in a language “reasonably expected” to be understood by the debtor, permitting it to include future receivables and providing that, in a chain of assignments, notification of a subsequent assignment constitutes notification of all prior assignments, thus preventing a failed notification earlier in the chain of assignments from affecting a subsequent assignment for which a valid notification to the debtor has been sent.

The notification rules are important because Article 17 bases the debtor’s proper discharge of its obligations on the notification, providing different rules for the debtor’s payment obligation before and after receipt of notification, as well as special rules in the event that the debtor receives multiple and contradictory notifications or payment instructions or notifications of partial assignments. If the debtor receives notification of assignment from the assignee, it has the opportunity to request adequate proof of an assignment. Article 17 does not affect any other local law grounds on which a debtor may be discharged, such as paying proceeds to a court.

Article 18 permits the debtor to exercise any right of set-off arising from the original contract or as part of the same transaction.

Other provisions (i) permit the waiver of defenses by the debtor (other than assignee’s fraudulent acts or debtor’s incapacity) (Article 19), (ii) establish rules governing the effectiveness of modifications of the original contract by the assignor and the debtor (Article 20) and (iii) restrict the recovery of payments from the assignee for a breach of the contract by the assignor (Article 21).

3. **Third Parties**
The third section of Chapter IV, Articles 22 through 25, addresses the rights of third parties claiming an interest in a receivable. The Working Group was not able to achieve the consensus necessary to create substantive law in most of the articles of this Section, and instead fell back on a series of choice of law rules.

The law of the State in which the assignor is located governs priority issues between an assignee and a competing claimant (Article 22). The application of the law of the assignor’s State may only be denied by a court if it is manifestly contrary to the public policy of the forum State, except that a preferential right in any insolvency proceeding in a State other than the assignor’s State shall be applied against an assignee if the first State has filed a declaration identifying any such preferential right (Article 23).

The Working Group was able to agree to recognize the concept of proceeds of a receivable, and to provide that the right to the proceeds received by the assignee followed the rights to the receivable. (Article 24). Article 24 also provides that, if proceeds are received by the assignor, the assignee has priority over competing claimants if (i) the assignor has received the proceeds under instructions from the assignee, (ii) the assignor has segregated the proceeds and (iii) the proceeds are reasonably indentifiable.

An assignee entitled to priority has the right to subordinate its claim to other assignees (Article 25).

F. Autonomous Choice of Law Rules (Chapter V)

Chapter V applies to matters that are within the scope of the Convention but not settled elsewhere (Article 26). This Chapter addresses issues such as the law that applies to the form of the contract of assignment (Article 27), to the mutual rights and obligations of the parties (Articles 28 and 29) and priority between competing claimants (Article 30). This chapter also states that nothing in the Convention prevents the application of mandatory rules (Article 31) and public policy (Article 32) of the law of the forum State.

G. Final Provisions (Chapter VI)

Chapter VI contains fifteen articles dealing with typical treaty law subjects such as ratification, denunciation, reservations and amendments.

Of particular note is Article 41, which allows a State to unilaterally declare to be outside the scope of the Convention a specific practice which otherwise would fall within the scope of the Convention. This provision was added to permit, or so as not to impede, the growth of financial innovations that might conflict with the terms of the Convention. States are not permitted, however, to make such declarations with respect to the same categories of trade receivables subject to the anti-assignment provisions of Article 9. This means that, within those categories of receivables, any innovations will have to fit within the structure of the Convention because States will not have the
option to exclude such innovations from the Convention. Since such innovations occur largely in the financial markets, however, this should not pose a major problem.

H. Annex

An annex to the Convention allows, but does not require, adopting States to address the priority issues as substantive law rather than as a conflicts rules. It provides the framework for an international filing system (Section II) and provides three alternative systems of priority rules based on: registration (Section I), the time of the creation of the contract of assignment (Section III) and the time notification of assignment has been sent to the debtor (Section IV). Article 42 of the Convention provides the mechanism by which States may declare the application of the appropriate portions of the Annex.

The Annex sets forth these three alternatives in an attempt to establish as much uniformity as possible. If all adopting States were to choose one of the three alternatives, determining a particular State’s priority rules would be simplified. There is also hope among advocates of a filing system that, if an international filing system is established among a few States, additional States may join the system as its merits are revealed.

IV. WHAT THE CONVENTION DOES AND DOES NOT ACCOMPLISH

In order to address, as far as possible, the needs and desires of the participating States and retain compatibility with various legal systems, it was necessary for the Convention to focus on areas where broad agreement was possible. Among the more important concepts adopted by the Working Group are:

· Rules Relating to Receivables Transactions. The Convention provides specific rules that set forth when the debtor may be notified of an assignment and who the debtor must pay, following assignment, in order to obtain a discharge of the receivable. The debtor’s set-off and recoupment rights are generally preserved. Furthermore, agreements of a debtor not to assert claims and defenses against an assignee are generally validated.

· Bulk, Future and Partial Receivables. The Convention recognizes the validity of assignments of receivables in bulk, present assignments of future receivables, and assignments of partial or undivided interests in receivables. The Convention does not require each receivable to be described in the contract of assignment and does not require a new contract of assignment when a future receivable, which is already subject to an existing assignment, is created.

· Anti-Assignment Clauses. The Convention generally overrides contractual clauses that restrict assignments of receivables arising from the sale or lease of goods, credit card receivables or receivables arising out of the licensing of intellectual property.
· **Choice of Law for Priority.** The Convention provides that the perfection and priority of an assignee’s interest in a receivable is determined by the law of the State in which the assignor is located. That law also determines whether the assignment is a “true” sale or, rather, a secured transaction. If an insolvency proceeding is commenced by or against the assignor in a State other than the State in which the assignor is located, the insolvency tribunal may not refuse to apply the priority rules of the State of the assignor’s location unless those rules are “manifestly contrary to the public policy of the forum State.” The insolvency court may, however, charge the receivables with preferential claims if otherwise required under the forum State’s insolvency laws.

· **Proceeds.** The Convention gives the assignee a substantive interest in the proceeds of an assigned receivable that are paid to the assignee directly or that are held by the assignor on instructions by and for the benefit of the assignee in a segregated lock box or in any other manner in which the proceeds are segregated from the assets of the assignor.

· **Optional Provisions.** The Convention sets forth optional choice of law rules to be applied in cross-border assignments of receivables even if the Convention would not otherwise apply. The Convention also sets forth in its Annex three alternative substantive priority rules that a State may choose to apply, including a priority rule based upon a notice filing system. In addition, the Annex contains general rules for the operation of such a notice filing system.

Notwithstanding these accomplishments, the Convention could have done more. The most serious deficiency in the Convention is that it lacks a single substantive rule for determining the priority of competing claims to the same receivable. Although the alternative adopted in the Convention, a choice of law rule, is by no means a negligible accomplishment, it is something of a disappointment for those legal practitioners and businesspeople who operate in States which have filing systems and who were hoping to see such a system established worldwide. One of the purposes of the Annex is to provide a framework for future development of such a worldwide system. Perhaps if a few States create an international filing system, others will be able to observe its merits in action.

Considering the diversity of the world’s economic and legal systems, however, the Convention remains a remarkable achievement. Time after time, the Working Group was divided, not between the haves and the have-nots but between civil law and common law countries. Even a requirement which seems as basic (to a common law practitioner) as requiring an assignment to be in writing was stricken from the Convention because some European countries have no such rule. As negotiated and drafted, the Convention is substantially compatible with the existing laws of Working Group countries, including Revised Article 9 of the Uniform Commercial Code.

Added to these issues of divergent economic and legal systems was the worldwide tendency of lawyers to favor precedent over novelty. The legal profession is properly resistant to change. For any legal system to function properly, the people who are subject to its strictures must be able to order their lives according to predictable rules and any major alteration of those rules disrupts thousands of transactions within that legal system. That the Working Group was willing to entertain
the revolutionary concepts embodied in the Convention is a tribute to both the achievement of the Convention’s proponents and the importance of the issue for the global economy.

Different philosophies also affected the outcome. The concept of receivables financing is alien to many legal systems and a threat to some. The perceived threat to countries with relatively fixed social classes cannot be discounted: allowing unknown upstarts to use their customers’ credit rating in order to help grow into viable competitors to established entities is nothing short of revolutionary. It is only a slight exaggeration to say that a sort of Catch-22 exists in some countries: you can’t borrow money from a bank unless you have a long relationship with the bank, but you can’t establish such a relationship without borrowing money. The dynamism of the lava lamp society creates as many losers as it does winners and forces all players to maximize their efficiency and productivity.

The issues on which the Working Group agreed far outweigh the issues on which no consensus was reached and set the stage for the resolution of those unresolved issues in the future. The list of achievements is long, among them: recognition of bulk and future receivables and partial assignments, a set of rules outlining the relationship between debtor, assignor and assignee, the override of anti-assignment clauses and the recognition of an assignee’s right to proceeds. Nearly all of these achievements represent a long and hard effort to achieve consensus within the Working Group. That it was in some ways an educational process was very clear to those who followed the Working Group, and it was encouraging to see delegates from legal systems in which receivables financing is unknown develop a sophisticated and enthusiastic knowledge of the concept over the course of the sessions.

There are other, more abstract, contributions that the Convention brings. The concept of receivables financing will become more visible to many countries for whom it would have otherwise remained a vague concept. In particular, countries which adopt the Convention will gain a familiarity with its format and may soon find it to be a useful tool for domestic purposes as well.

V. IMPACT OF ADOPTION ON U.S. LAW AND BUSINESS

For lawyers and businesspeople in the United States, as in the rest of the world, the Convention offers excellent prospects for added certainty in international trade. The Convention does not represent a change in existing law so much as it introduces the rules of law into an area of international trade which hitherto has had to rely on private contract law or forego the opportunity. Reliance on private contract law has required more elaborate transactional structures which have contributed to higher transaction costs. In addition, since such structures are not adequate substitutes for a stable and predictable public law regime, resort to private contract law brings with it greater risk and, therefore, higher borrowing costs.

The increase in predictability, the reduction in risk and the simplification of transaction structure permitted by the Convention, therefore, can be expected to benefit international trade in two ways. First, transactions which were previously uneconomical may now be feasible, making credit available to some borrowers which had previously been unable to obtain it. Second, even
transactions which would have been economical under the old regime will involve less risk, thus freeing capital for additional transactions.

The Convention will not, however, spread such benefits evenly. Because priority issues are determined by local law, only those states which have enacted a domestic law compatible with the Convention and trusted by lenders will benefit.

U.S. lawyers drafting the documentation for transactions affected by the Convention will have to be alert to differences between the Uniform Commercial Code and the Convention. Although these differences are not expected to disrupt transactions, they will be traps for the practitioner who is not alert. The assignor’s location may differ between the Convention and the UCC, and, since priority issues are governed by the law of the assignor’s location, this could lead to the “wrong” law being applied to a situation. The Convention and UCC rules also differ as to when an assignee may notify a debtor that its contract has been assigned and as to whether modifications of a contract between a debtor and an assignor are binding on the assignee, with the Convention taking a more permissive position in both cases. In addition to such clear differences, other areas of distinction will arise, particularly with respect to those issues which will fall under the choice of law provisions of the Convention, where a U.S. lawyer will be tempted to apply U.S. law to situations in which the Convention requires foreign law to apply. These differences, however, should not impose an undue burden on U.S. lawyers in such situations.

VI. CONCLUSION

The Convention has the potential to do much good and does not appear to have any significant downside. It will help bring greater consistency to cross-border transactions and ease the introduction of new financing techniques. It will bring cheaper and more abundant credit to developing countries by reducing risk. It will make credit available to creditworthy persons who might otherwise be neglected. In the case of the United States as a creditor of developing countries, it will bring increased certainty in such transactions and reduce their risk.

The Convention is a worthy improvement to international trade law. It is the recommendation of the Committee that this treaty be adopted by the United States and generally by all countries of the world.
Committee on Foreign and Comparative Law
Committee Members

Peter M. Hosinski, Chair
Curt D. Buyum, Secretary

Alain Armand
Sheetal Asrani
Michael Sherrin Barry
Joy C. Barson
Thomas F. Berner*
Warren T. Buhle
Drew G.L. Chapman
Catherine Dupuy-Burin des Roziers
Gianluigi Esposito
Prof. E. Allan Farnsworth
Louis Fontaliran
Jingwei Lu Fu
Yao Fu
Juan Enrique Garcia
Ralph J. Glass
Chuanhsi S. Hsu

Martin D. Jacobson
Marco V. Masotti
Christopher P. McClancy
Guy A. Reiss
William F. Rosenblum, Jr.
Nella M. Scalora
Holger Spamann
Brian Wha-Li Tang
Naveen Thakur†
Janine Tramontana
Kimberly C. Turina
Catherine M. Ugeux
Rafael Vargas
Tsugumichi Daniel Watanabe
Ralph E. Winnie, Jr.
Daniel A. Wuersch

* Member principally responsible for the drafting of this report.
† Student member.