國　立　清　華　大　學　命　題　紙

95 學年度　科技法律研究所　系（所）　甲、乙　組碩士班入學考試

科目　英文（含文獻評析）　科目代碼 5102，5202　共 9 頁第 1 頁　*請在【答案卷卡】內作答

1. 請閱讀以下言論，並以中文回答問題：(40%)

Testimony of John Hodulik, CFA
Managing Director, UBS Investment Research
FCC VOIP Forum
Washington, DC
December 1, 2003

My name is John Hodulik and I am the Wireline Telecommunications Analyst at UBS Securities LLC. Thank you for the opportunity to address the Commission this morning. I hope to bring a bit of a financial perspective to the forum and explain how investors view the emergence of VoIP.

I think we need to begin today's discussion by defining the topic. Voice over IP specifies both a technology and a service. The technology is Internet protocol. The service is voice transmission. I believe VoIP exists in three main forms: VoIP in carrier networks, VoIP in private networks, and VoIP in the public Internet. This last form exists in both server-based models and through peer-to-peer networking. Sometimes the lines delineating these forms from one another are not clear.

IP technology has been increasingly employed by the public switched telephone network ("PSTN") in carrier networks to transmit telephone calls, predominantly deployed on long haul routes to improve bandwidth efficiency. Meanwhile, large corporations have been placing more and more of their voice traffic on their own private networks via IP. UBS, as an example, recently completed a layer-3 switch upgrade enabling it to bypass the PSTN in many instances and to significantly reduce its telecommunications costs. Now, the benefits of VoIP are making their way into the consumer and small business markets. Small entrepreneurial companies and cable providers are driving this acceleration in the consumer market while the Bells largely focus their VoIP strategies on the business market.

VoIP presents the Regional Bell Operating Companies with their greatest challenge yet. While they stand to benefit from VoIP as an insurgent technology in the business market, their dominant share of the consumer market will erode at a faster rate as this technology is deployed. **A significant amount of voice traffic is** already moving to alternative platforms. Wireless substitution and electronic messaging are already having a profound impact on minutes of use. The effects of falling volumes are compounded by the aggressive price points of these competing technologies. VoIP services, either from cable or edge-agnostic providers, have the potential to become a much larger factor than either of these.

Due to the open standards of the Internet and IP technology, a company no longer needs to control the transport infrastructure to provide the application. This has "de-coupled" terrestrial voice service, a $200 billion market, from the underlying telecommunications networks. Ownership of this network has always been one of the Bells largest advantages. This "de-coupling" dramatically lowers barriers to entry for new competitors and turns on its head the relationship between profitability and investment intensity in the telecom sector. IP technology also creates another deflationary factor for the industry and largely lifts the constraints that have protected local voice service from the effects of Moore's Law.

Open standards should also lead to the development of new, IP-based services provided by third party developers. These services will include unified messaging, video-conferencing, entertainment services, and many others that are not voice related. New, higher value services will be introduced as funding flows into the developer community once the user base has reached critical mass. Large established software companies will also attempt to add value as they push for greater control of the IP device.

As a result, the pace of change in the market for "voice" services will accelerate, becoming more similar to that of web-based services than the traditional PSTN. **Eventually, these new services will become the** main driver for the acceptance of VoIP and it will become increasingly more difficult to determine what is a traditional "phone call." Importantly, it should also lead to the commoditization of enhanced services currently offered by local service carriers such as call waiting, caller ID and voicemail. These services contribute a significant portion of the ILECs' profits in the consumer market.

As a result, operating cash flow margins in the sector will fall as local service revenues contract. Local voice and switched access revenues generate approximately 60-65% of Bell wireline revenues and at least 75% of the profits based on our estimates. However, these revenues are declining at a rate of over 8% per year. Rural carriers have even greater reliance on access revenues, which will continue to diminish as VoIP becomes pervasive. We believe it will be extremely difficult for the carriers to replace these profits through sales of new services such as DSL and long distance as these products typically **produce lower margins.**

Currently, the Bells generate operating cash flow margins of roughly 40% of sales before pension effects. Without effective costs controls and job reductions, we believe margins could fall significantly for the group over the next five years as traffic continues to migrate to new platforms. This has significant ramifications for investment in telecommunications infrastructure. The Bells constitute the vast majority of spending on wireline carrier network infrastructure in the United States, at approximately 70% of the total. As VoIP-based providers take on the roll of the ILECs, investment by the large incumbents should remain highly constrained.

Ironically, the existing regulatory framework is promoting the adoption of VoIP as well as any focused strategy could reasonably be expected to do. When VoIP providers say they worry that regulators could slow the acceptance of the technology and their growth, they are acknowledging the underlying regulatory benefits they have relative to the traditional telcos.

If the regulatory imbalance remains, the incentive for incumbent carriers to shift traffic to IP-based platforms will remain strong. The Bells have made it clear with recent announcements regarding VoIP that they will follow the path of least resistance. Over time, this will put undue stress on the existing regulatory framework, making the existing intercarrier compensation regime and Universal Service funding mechanisms untenable.

From a network standpoint, voice and IP services can be commingled relatively easily. However, this marriage pits the micro-managed regulatory world of voice, where returns are almost guaranteed, with the hands-off, market driven world of IP where companies are left to sink or swim on their own. From a capital market's standpoint, much of the uncertainty is because there appears to be a regulatory void when it comes to VoIP. The FCC needs to take a leadership position, creating one set of rules that distinguish between the different types of VOIP. Until this is completed, investors will remain wary about funding new ventures that provide the service.

I cannot stress enough the importance of creating a regulatory framework that will stand the test of time, allowing investors to anticipate the winners and losers based on strategy and execution rather than unforeseeable changes in Washington. A patchwork of differing state regulations does nothing to provide clarity and, frankly, makes no sense considering the lack of geographic distinction on the Internet where there are no LATAs or state boundaries. While there is certainly a role for the states regarding public policy aspects of VoIP based telephony service, I believe this is an issue that requires a national standard, which is something that only you can develop.

In sum, I believe VoIP has created not just the need but also the opportunity for regulators to rethink the traditional framework that governs telephony in the United States. I believe this forum should be as much about creating parity as it is about fostering the growth of VoIP. Regulating VoIP similar to the traditional telephone network is not the answer. The answer is to fundamentally reassess regulation of the traditional telephone network before the value-creating portion of that infrastructure and the regulatory framework that governs it, becomes obsolete.

問題：

(1) 請將以上言論分為三大要點，分別簡述之。(20 %)

(2) 請以批判角度，提出你個人對於以上言論之看法。(20%)

2. Read the following article and answer the questions below in English: (30%)

In the southern region of the island nation of Taiwan live the Ami people, Taiwan's largest surviving indigenous tribe. Because the Ami language has not been transcribed in written form, oral tradition is the only method by which the tribe has transmitted cultural knowledge for thousands of years. Lifvon Guo, an Ami tribal elder, was entrusted to act as a "keeper" of the Ami traditional folksongs as a young child. At the age of ten, Lifvon left school to tend to the animals and the crops. He then committed his captivating voice to the preservation of the ancestral songs of his culture as a tribal singer for almost seventy years.

In the mid 1990's, Lifvon and other Ami tribal members were invited by the Ministries of Culture of Taiwan and France to perform their aboriginal music across Europe. Without their knowledge, the performances were recorded and published on a compact disc a year later. The CD was being held in the French Cultural Museum when it was discovered by musician Michael Cretu, known in the music industry as "Enigma." Cretu scoured recordings of tribal performances in hopes of finding the perfect piece to digitally integrate into his own music. Cretu was immediately mesmerized with Lifvon's haunting voice, and he purchased the rights to the recording from an arm of the French Cultural Ministry. Until Lifvon received a call from a friend in Taipei, telling him that the Ami's "Song of Joy" was playing on the radio, no one in the Ami community was aware of the appropriation.

The Ami's sacred "Song of Joy" was played around the world, as Enigma gained increasing international fame. The tribe had no choice but to observe a piece of its history and culture slip from its grasp. The Ami confronted the futility of challenging the initial infringement but were also powerless to determine the fate of the recordings, reap the rewards of their own creation, or control resulting violations of tribal law and blatant distortions of their work.

The account of the appropriation of the Ami "Song of Joy" illustrates just a few of the challenges indigenous peoples face in protecting traditional knowledge within the rubric of Western intellectual property law. It has become abundantly clear that intellectual property regimes fail to adequately capture all of the cultural and economic significance of community-based, traditional knowledge or to ensure the perpetuation of local systems. Given that so many resources have been put into developing comprehensive laws to ensure the knowledge protection of intangible knowledge, one might ask why current legal systems do not safeguard the cultural and intellectual property of indigenous groups. The problem is multi-faceted. First, intellectual property law was largely developed in the West, and its models are based on a capitalistic philosophy designed to serve a market economy. The mere fact that works of intellectual creativity and innovation, so-called "works of the mind," are granted the status of protectable individual property itself represents a Western view. As such, intellectual property laws are set up to meet the needs of the majority society. Western concepts of exclusive ownership, alienability and monopoly rights are largely inconsistent with indigenous peoples' traditional forms of ownership, which tend to focus on collective, intergenerational creations that often do not contain rights of alienability and which are produced from community-based economies. Given that Western models of intellectual property are now becoming dominant in the world, it is doubtful that international laws will come any closer to protecting indigenous peoples than many of those already in place.

The Ami's "Song of Joy" illustrates the conflict between indigenous works and Western copyright law. In the prevailing system, copyright protection is extended to those works that are original, created by an identifiable author or authors and fixed in a tangible medium of expression. As inter-generational group creations that are continually in a state of flux, indigenous creations do not qualify for copyright protection. By definition, this leaves indigenous works vulnerable and subject to appropriation.

Questions:

(1) Do you agree that the Ami people should be entitled to intellectual property rights over the "Song of Joy"? Please explain why. (10%)

(2) What are the major characters of Western concept of intellectual property? Why are they not compatible with indigenous peoples' traditional forms of property and therefore not able to protect their ownership? (10%)

(3) What is your suggestion to resolve the dilemma created by the application of Western models of intellectual property over indigenous traditional knowledge? (10%)

3. 請閱讀以下言論，並以中文回答問題：(30%)

IN THE MATTER OF BABY M
SUPREME COURT OF NEW JERSEY
109 N.J. 396; 537 A.2d 1227; 1988 N.J. LEXIS 1; 77 A.L.R.4th 1
September 14, 1987, Argued
February 3, 1988, Decided

I. FACTS

In February 1985, William Stern and Mary Beth Whitehead entered into a surrogacy contract. It recited that Stern's wife, Elizabeth, was infertile, that they wanted a child, and that Mrs. Whitehead was willing to provide that child as the mother with Mr. Stern as the father.

II. INVALIDITY AND UNENFORCEABILITY OF SURROGACY CONTRACT

We have concluded that this surrogacy contract is invalid. Our conclusion has two bases: direct conflict with existing statutes and conflict with the public policies of this State, as expressed in its statutory and decisional law.

One of the surrogacy contract's basic purposes, to achieve the adoption of a child through private placement, though permitted in New Jersey "is very much disfavored." Its use of money for this purpose -- and we have no doubt whatsoever that the money is being paid to obtain an adoption and not, as the Sterns argue, for the personal services of Mary Beth Whitehead -- is illegal and perhaps criminal. In addition to the inducement of money, there is the coercion of contract: the natural mother's irrevocable agreement, prior to birth, even prior to conception, to surrender the child to the adoptive couple. Such an agreement is totally unenforceable in private placement adoption. Even where the adoption is through an approved agency, the formal agreement to surrender occurs only *after* birth, and then, by regulation, only after the birth mother has been offered counseling. Integral to these invalid provisions of the surrogacy contract is the related agreement, equally invalid, on the part of the natural mother to cooperate with, and not to contest, proceedings to terminate her parental rights, as well as her contractual concession, in aid of the adoption, that the child's best interests would be served by awarding custody to the natural father and his wife -- all of this before she has even conceived, and, in some cases, before she has the slightest idea of what the natural father and adoptive mother are like.

The foregoing provisions not only directly conflict with New Jersey statutes, but also offend long-established State policies. These critical terms, which are at the heart of the contract, are invalid and unenforceable; the conclusion therefore follows, without more, that the entire contract is unenforceable.

A. Conflict with Statutory Provisions

The surrogacy contract conflicts with: (1) laws prohibiting the use of money in connection with adoptions; (2) laws requiring proof of parental unfitness or abandonment before termination of parental rights is ordered or an adoption is granted; and (3) laws that make surrender of custody and consent to adoption revocable in private placement adoptions.

B. Public Policy Considerations

The surrogacy contract's invalidity, resulting from its direct conflict with the above statutory provisions, is further underlined when its goals and means are measured against New Jersey's public policy. The contract's basic premise, that the natural parents can decide in advance of birth which one is to have custody of the child, bears no relationship to the settled law that the child's best interests shall determine custody.

This is the sale of a child, or, at the very least, the sale of a mother's right to her child, the only mitigating factor being that one of the purchasers is the father. Almost every evil that prompted the prohibition on the payment of money in connection with adoptions exists here.

The differences between an adoption and a surrogacy contract should be noted, since it is asserted that the use of money in connection with surrogacy does not pose the risks found where money buys an adoption. First, and perhaps most important, all parties concede that it is unlikely that surrogacy will survive without money. Despite the alleged selfless motivation of surrogate mothers, if there is no payment, there will be no surrogates, or very few. That conclusion contrasts with adoption; for obvious reasons, there remains a steady supply, albeit insufficient, despite the prohibitions against payment. The adoption itself, relieving the natural mother of the financial burden of supporting an infant, is in some sense the equivalent of payment.

Second, the use of money in adoptions does not *produce* the problem -- conception occurs, and usually the birth itself, before illicit funds are offered. With surrogacy, the "problem," if one views it as such, consisting of the purchase of a woman's procreative capacity, at the risk of her life, is caused by and originates with the offer of money.

Third, with the law prohibiting the use of money in connection with adoptions, the built-in financial pressure of the unwanted pregnancy and the consequent support obligation do not lead the mother to the highest paying, ill-suited, adoptive parents. She is just as well-off surrendering the child to an approved agency. In surrogacy, the highest bidders will presumably become the adoptive parents regardless of suitability, so long as payment of money is permitted.

Fourth, the mother's consent to surrender her child in adoptions is revocable, even after surrender of the child, unless it be to an approved agency, where by regulation there are protections against an ill-advised surrender. In surrogacy, consent occurs so early that no amount of advice would satisfy the potential mother's need, yet the consent is irrevocable.

In the scheme contemplated by the surrogacy contract in this case, a middle man, propelled by profit, promotes the sale. Whatever idealism may have motivated any of the participants, the profit motive predominates, permeates, and ultimately governs the transaction. The demand for children is great and the supply small. The availability of contraception, abortion, and the greater willingness of single mothers to bring up their children has led to a shortage of babies offered for adoption. The situation is ripe for the entry of the middleman who will bring some equilibrium into the market by increasing the supply through the use of money.

Intimated, but disputed, is the assertion that surrogacy will be used for the benefit of the rich at the expense of the poor. In response it is noted that the Sterns are not rich and the Whiteheads not poor. Nevertheless, it is clear to us that it is unlikely that surrogate mothers will be as proportionately numerous among those women in the top twenty percent income bracket as among those in the bottom twenty percent. Put differently, we doubt that infertile couples in the low-income bracket will find upper income surrogates.

The point is made that Mrs. Whitehead *agreed* to the surrogacy arrangement, supposedly fully understanding the consequences. Putting aside the issue of how compelling her need for money may have been, and how significant her understanding of the consequences, we suggest that her consent is irrelevant. There are, in a civilized society, some things that money cannot buy.

The long-term effects of surrogacy contracts are not known, but feared -- the impact on the child who learns her life was bought, that she is the offspring of someone who gave birth to her only to obtain money; the impact on the natural mother as the full weight of her isolation is felt along with the full reality of the sale of her body and her child; the impact on the natural father and adoptive mother once they realize the consequences of their conduct. Literature in related areas suggests these are substantial considerations, although, given the newness of surrogacy, there is little information.

In sum, the harmful consequences of this surrogacy arrangement appear to us all too palpable. In New Jersey the surrogate mother's agreement to sell her child is void. Its irrevocability infects the entire contract, as does the money that purports to buy it.

問題：

(1) 依據本判決，為何當事人之間契約應該無效？(10%)

(2) 試翻譯畫底線之段落為中文。(10%)

(3) 代孕契約是否應無效？請以本判決之論點為基礎，提出你個人看法。(10%)