

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* GERMANO CARONNI, AMIT GUPTA, SANDEEP KUMAR,  
TOM R. MARKSON, CHRISTOPH L. SCHUBA and GLENN C. SCOTT

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Appeal 2006-2954  
Application 09/458,020  
Technology Center 2100

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Decided: March 30, 2007

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Before KENNETH W. HAIRSTON, HOWARD B. BLANKENSHIP, and  
MAHSHID D. SAADAT, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1-6, 8-15, 17-20, and 22. Claims 7, 16, and 21 have been canceled.

We reverse.

## BACKGROUND

Appellants' invention relates to data processing systems over private networks that use components from a public network infrastructure. An understanding of the invention can be derived from a reading of exemplary independent claims 1 and 8, which are reproduced as follows:

1. A distributed system comprising a network with a plurality of channels having nodes on devices, the system further comprising:
  - an access control program that authenticates a new node and performs admission control for all of the nodes on the network;
  - for each of the plurality of channels, a key management program unique to the channel that implements a key management policy for maintaining keys used by the nodes on the channel for communicating in a secure manner, each key management program being decoupled from the access control program; and
  - processors for running the access control program and the plurality of key management programs.
  
8. A method in a data processing system connected to a network with a plurality of channels having nodes, the data processing system having an access control program, a unique key management program for each of the plurality of channels, and a new node, the method comprising the steps of:
  - under the control of the new node,
    - sending a request to the access control program for the new node to join the network, the sending initiated by a user;
  - under the control of the access control program,
    - receiving the request for the new node to join the network;
    - authenticating the new node;
    - accessing an admission policy for the user, the admission policy indicating admission criteria;
    - determining whether the user satisfies the admission criteria; and
    - when the new node has been authenticated

successfully and the user satisfies the admission criteria,  
sending an indication to the key management program  
for a channel corresponding to the new node that the new  
node has joined the network;  
under the control of the key management program for the  
channel corresponding to the new node,  
receiving the indication;  
accessing a predefined key management policy for the  
channel corresponding to the new node;  
generating a key for use in communicating in a secure manner  
over the channel in accordance with the predefined key management  
policy;  
and  
sending the key to the new node; and  
under control of the new node,  
receiving the key from the key management program for  
the channel corresponding to the new node; and  
sending a communication to the nodes over the channel  
corresponding to the new node in a secure manner using the key.

The Examiner relies on the following prior art references:

Presttun	US 5,115,466	May 19, 1992
Matsumoto	US 6,215,877 B1	Apr. 10, 2001 (filed Sep. 23, 1998)

The rejections as presented by the Examiner are as follows:

1. Claims 1-6 and 18-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Presttun.
2. Claims 8-15, 17, and 22 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Matsumoto.

Rather than reiterate the opposing arguments, reference is made to the Briefs and the Answer for the respective positions of Appellants and the Examiner.

Rejection of claims 1-6 and 18-20 under 35 U.S.C. § 103(a)

We first address the 35 U.S.C. § 103 rejection of the claims over Presttun.

ISSUE

With respect to claims 1-6 and 18-20, Appellants argue that neither the MA nor the CM, as described in Presttun, is unique to any channel (Br. 20). Thus, the issue turns on whether the MA or the CM constitutes a key management program unique to the channel that implements a key management policy unique to the channel.

FINDINGS OF FACT

Presttun relates to dynamically attaching crypto-modules to specific channels whenever needed to enable the channel to carry both unsecured and secured or encrypted data (col. 2, ll. 42-48).

Presttun further discloses that the CM's are connected to at least two B-channels for the enciphered and deciphered information (col. 4, ll. 3-13).

Presttun describes CM's as being based on deciphering keys which are distributed from the MA to the relevant CM through the control path of the crypto-pool (col. 4, ll. 14-22).

## PRINCIPLES OF LAW

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. *See In re Kahn*, 441 F.3d 977, 987-988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), *In re Young*, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Moreover, in evaluating such references it is proper to take into account not only the specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

## ANALYSIS

Appellants correctly point out that each CM in Presttun is connected to at least two channels (Br. 20). While only one secure or deciphering channel is connected to each CM, it is the MA that provides the key for multiple CM's. Therefore, we disagree with the Examiner (Answer 14) that the claimed "key management program unique to the channel that implements a key management policy" is in the form of CM's of Presttun and find the Examiner's characterization of the CM as the key management program to be factually incorrect. In fact, the key management program in Presttun that implements a key management policy for maintaining used keys is provided by MA which is not unique to each channel. Both claims 1 and 18 require a key management program which is unique to each channel and implements a key management policy.

Based on the teachings of Presttun outlined *supra*, we find ourselves persuaded by Appellants' argument that the MA is not the same as the

claimed key management program unique to the channel that implements a key management policy. Therefore, we cannot sustain the 35 U.S.C. § 103 rejection of independent claims 1 and 18, nor of their dependent claims 2-6, 19, and 20 over Presttun.

Rejection of claims 8-15, 17, and 22 under 35 U.S.C. § 102

We now turn to the rejection of the claims under 35 U.S.C. 102 over Matsumoto.

ISSUE

With respect to claims 8-15, 17, and 22, Appellants argue that Matsumoto provides for a key management server that is connected to many channels instead of being unique to the channel corresponding to the new node (Br. 28-31). The issue turns on whether the key management server of Matsumoto or any of its parts are unique to any channel.

FINDINGS OF FACT

Matsumoto, in Figure 2, depicts key management server 64a connected to multiple channels.

The key management server of Matsumoto includes a channel secret key generation which generates a channel secret key unique to each channel (col. 9, ll. 10-20).

Appellants' claim 8 requires a unique key management program for each channel which generates a key after a predefined key management policy for that channel is accessed.

## PRINCIPLES OF LAW

A rejection for anticipation under section 102 requires that the four corners of a single prior art document describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation. *See Atlas Powder Co. v. IRECO Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999); *In re Paulsen*, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

## ANALYSIS

The Examiner incorrectly characterizes the generation of a key for each channel in Matsumoto as the claimed unique key management program for each channel (Answer 17). The claim not only requires the key to be generated in accordance with a predefined key management policy for the channel, but also recites a unique key management program for each channel. Although the generated key for each channel in Matsumoto is unique, the generating server is not unique to that channel (col. 9, ll. 10-20).

We also disagree with the Examiner that the key management program of Matsumoto is in the form of a key (Answer 17). As discussed above, the claimed key management program actually generates the key for a channel based on the policy for that channel and cannot be the key itself.

Therefore, based on the teachings of Matsumoto outlined *supra*, and to the extent claimed, we find ourselves in agreement with Appellants and find that the Examiner erred in rejecting Claim 8 under § 102 over Matsumoto. Similar to claim 8, independent claims 13 and 22 include limitations directed to the key management program unique to each channel

that generates a key based on the key management policy for that channel, which are shown to be absent in the applied prior art. Accordingly, we cannot sustain the 35 U.S.C. § 102 rejection of independent claims 8, 13, and 22, nor their dependent claims 9-12, 14, 15, and 17 over Matsumoto.

#### CONCLUSION OF LAW

On the record before us, we find that the Examiner's rejection of claims 1-6 and 18-20 is not supported by a legally sufficient basis for holding that the claimed subject would have been obvious within the meaning of § 103(a). We also find that the Examiner has failed to set forth that Matsumoto prima facie anticipates claims 8-15, 17, and 22.

#### DECISION

The decision of the Examiner rejecting claims 8-15, 17, and 22 under 35 U.S.C. § 102 and rejecting claims 1-6 and 18-20 under 35 U.S.C. § 103 is reversed.

Appeal 2006-2954  
Application 09/458,020

REVERSED

ELD

SUN MICROSYSTEMS/FINNEGAN, HENDERSON LLP  
901 NEW YORK AVENUE, NW  
WASHINGTON DC 20001-4413