

1 65. The Klein Declaration refers to a “secret” room being constructed within AT&T
2 Corp.’s ██████████ Facility, called the “██████████ Room.” Klein Decl., ¶ 12.

3 66. While Mr. Klein worked at the ██████████ Facility, where he oversaw its
4 ██████████ room,²⁶ his duties included the installation of new fiber-optic circuits with
5 respect to AT&T’s WorldNet Internet service.²⁷ Klein Decl., ¶¶ 15, 20.

6 67. In the course of his employment by AT&T, Mr. Klein reviewed the three documents
7 collectively referred to as the Klein Exhibits. Klein Decl., ¶¶ 25-26, 28.

8 68. The ██████████ Configuration, for purposes of my declaration and expert opinions,
9 includes the following basic elements: a room referred to in the Klein Declaration as the ██████████
10 ██████████ Room, ██████████ Room, ██████████ Room ██████████
11 ██████████ Room, ██████████
12 ██████████ sophisticated computers and other electronic devices located in or to be installed in this
13 room; sophisticated routers and switches capable of switching traffic among the computing systems
14 in the room, and also to other locations; and cables associated with data circuits entering and
15 exiting this room.

16 69. The ██████████ Room that Mr. Klein describes in his declaration is fully consistent
17 with the various ██████████ rooms referred to in the Klein Exhibits.

18 70. The Klein Exhibits describe procedures for splitting or diverting ██████████
19 communications traffic associated with AT&T Corp.’s Common Backbone (CBB) fiber-optic
20 network by means of splitters²⁸ that fed into the ██████████ Room.

21 71. By following these procedures, all the communications carried on the associated
22 fiber optic circuits were diverted or copied to the ██████████ Room and could be made available
23

24 ²⁶ The ██████████ room and its equipment as described by Mr. Klein is a facility for
25 transmitting both domestic and international wire or electronic communications by
26 electromagnetic, photoelectronic or photooptical means. Klein Decl., ¶¶ 15, 19, 22.

27 ²⁷ The AT&T WorldNet Internet service provides its users with the ability to send or receive email,
28 to browse the web, and to send or receive other wire or electronic communications.

²⁸ I explained the function of a *splitter* earlier in this declaration, in the section on “Background –
Fiber Optics”. ██████████

██████████ Room.

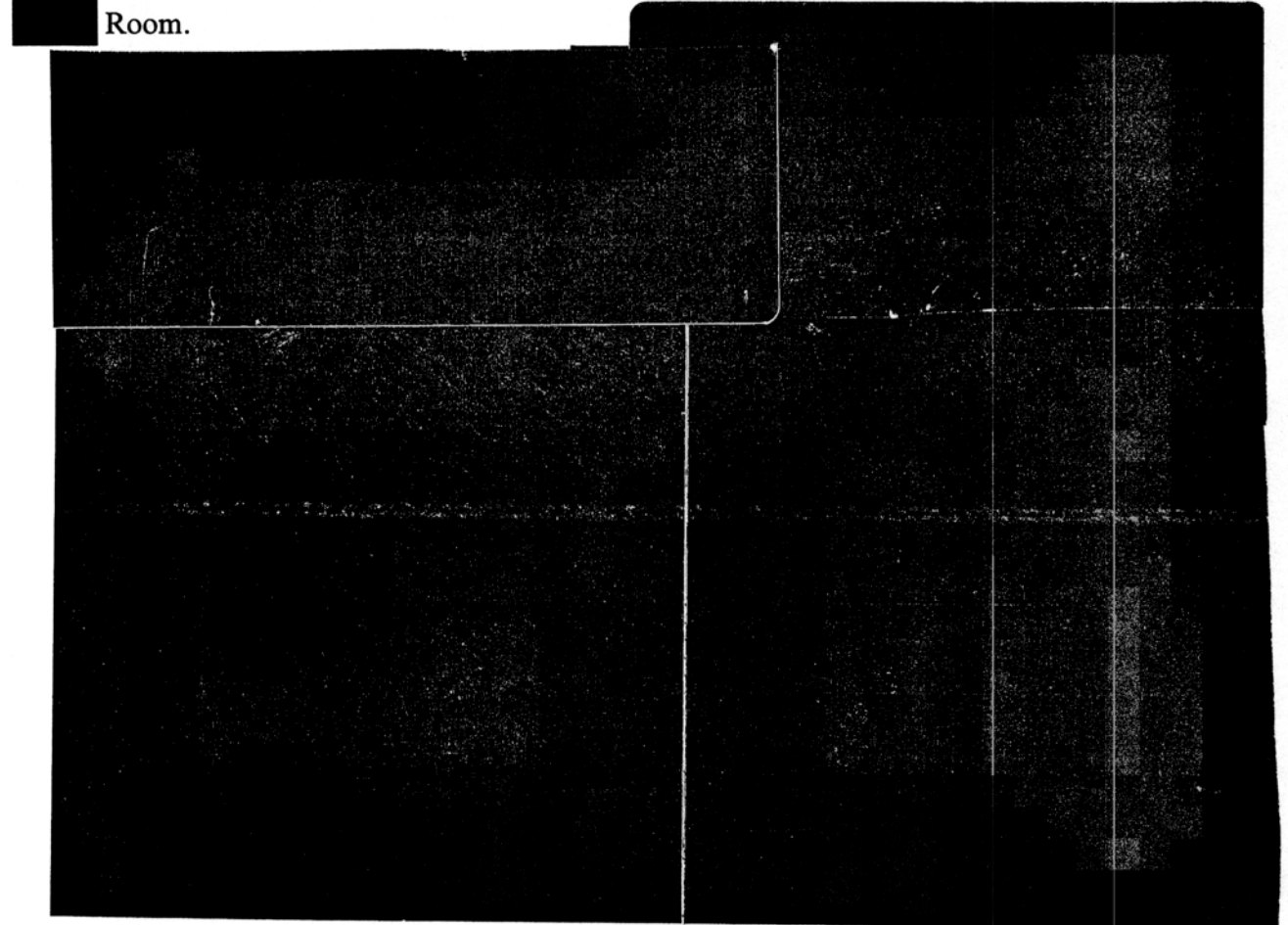
1 to any devices in that room.

2 72. With respect to the [REDACTED] Room in [REDACTED], the process resulted in the
3 diversion of all, or substantially all, of AT&T's [REDACTED] traffic at the [REDACTED]
4 facility to [REDACTED] equipment, with no significant adverse impact on AT&T's continuously operating
5 CBB Internet backbone.

6 [REDACTED] The figure below helps to clarify these relationships. [REDACTED]

7 [REDACTED]
8 Room.

9 [REDACTED]
10 Room.



25 [REDACTED]
26 74. The Klein Exhibits also list equipment linked to or contained in the [REDACTED]
27 Room. These include sophisticated computers and other electronic equipment. See Klein Exh. C, p.
28 3 (" [REDACTED] "). At the same time, the Klein Exhibits do not indicate the quantities of

1 equipment, nor do they indicate the precise interconnections between them; consequently, the
2 connections depicted within the [REDACTED] Room in Figure 2 should be considered to be
3 suggestive but not necessarily exact.

4 75. An important group of devices in the [REDACTED] Room is the [REDACTED],
5 which is a [REDACTED] and the [REDACTED] Server.²⁹ As I explain in more detail
6 below, the [REDACTED] system is designed to apply logical tests to large volumes of data in real time. It is
7 well suited to the initial screening function of a comprehensive surveillance system – in fact,
8 surveillance is one of the system’s primary functions.³⁰

9 76. The Klein Exhibits also refer to the [REDACTED] and to the [REDACTED]
10 circuit[s].³¹ Klein Exh. C, pp. 6, 12, 42. As I explain in more detail below, it is highly likely that
11 this [REDACTED] backbone provides a fiber-optic network connected to the [REDACTED] Room, but separate
12 and distinct from the CBB. In other words, while the [REDACTED] Room is connected to the CBB
13 (from which it receives communications), it is also connected to another network, and signals can
14 be sent out of or into the [REDACTED] Room over the [REDACTED].

15 77. In sum, the general architecture of the [REDACTED] Configuration is that communications on
16 the CBB are split by means of splitters in a splitter cabinet, and that these communications feed
17 into the [REDACTED] Room where they can be processed by the equipment in the [REDACTED]
18 Room. At the same time, the [REDACTED] provides a separate, two-way channel of
19 communication with the [REDACTED] Room. The documents reviewed do not, however, indicate
20 what entities can receive signals or information from or send signals or information into the [REDACTED]
21 [REDACTED] Room via the [REDACTED]. I consider it highly probable that one or more Centralized
22 Processing Facilities exist, as shown in Figure 2, but that belief is based on the nature of the job
23 that the [REDACTED] system is designed to do, rather than being based on the Klein Exhibits themselves.

25 ²⁹ See Klein Exh. C, p. 3 (“[REDACTED]”). The [REDACTED] is apparently implemented in
26 conjunction with a [REDACTED], possibly as software running on the [REDACTED].

27 ³⁰ [REDACTED]
28 ³¹ In the text, both the [REDACTED] backbone circuits and the [REDACTED] circuits are referred to in the singular. I believe that these are grammar errors on the part of the author, and that both should have appeared in the plural.

1 **CAPABILITIES OF THE SAN FRANCISCO [REDACTED] CONFIGURATION**

2 78. In this section, I explain my expert opinions about the activities likely to be
3 occurring in the [REDACTED] Room in [REDACTED].

4 79. In order to understand the capabilities of this configuration, it is particularly
5 important to understand the capabilities of the [REDACTED] and the
6 [REDACTED] website provides singularly little information about their offerings,
7 but a few public sources provide useful supporting detail, notably including a presentation that
8 [REDACTED] made to the [REDACTED], and a [REDACTED] presentation available on
9 the website of [REDACTED].³²

10 80. These devices are designed to capture data directly from a network, apply a
11 structured series of tests against the data, and respond appropriately. According to the [REDACTED]

12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]³³

20 81. Given the very high data rates that are supported, it is likely that many sophisticated
21 techniques are used to accelerate the processing.

22 [REDACTED] The [REDACTED] presentation on [REDACTED] web site³⁴ makes it clear that the [REDACTED] system
23 has the ability to inspect user application data (i.e. content), and not merely protocol headers. In
24 this context, it is worth noting that references to layer numbers reflect the [REDACTED]

25 ³² [REDACTED]

26 [REDACTED]
27 ³³ [REDACTED]

28 ³⁴ [REDACTED]

1 [REDACTED]

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12

13 83. The statements in the [REDACTED] document make clear that the [REDACTED] system is well suited

14 to process huge volumes of data, including user content, in real time. It is thus well suited to the

15 capture and analysis of large volumes of data for purposes of surveillance.

16 84. The following figure, which is taken from the [REDACTED] presentation to [REDACTED],

17 makes it clear that the system, in addition to its other capabilities, is designed to identify traffic of

18 interest and to act on it. It has the ability to store interesting traffic to the onboard disk that is part

19 of the system.

20

21

22

23

24

25 35 [REDACTED]

26 [REDACTED]

27 For a non-technical explanation of

28 protocol layering in the context of the Internet, see section 2 of my paper "Evolving Core Capabilities of the Internet," Journal on Telecommunications and High Technology Law, 2004 (Exhibit G).