# Exhibit 3

**Exhibit B4 to Hughes Invalidity Contentions**

## Invalidity Chart for U.S. Patent No. 6,240,073 Based on Anderlind

As set forth below, Hughes contends that "Resource Allocation in Multi-Service Wireless Access Networks" by Anderlind ("Anderlind") anticipates one or more claims of U.S. Patent No. 6,240,073 ("the '073 Patent") or renders '073 Patent obvious, either alone or in conjunction with other prior art. The '073 Patent was filed on November 14, 1997, and makes no claim to an earlier priority date. Anderlind is, on its face, prior art to the '073 Patent at least under 35 U.S.C. § 102(b) as of its October 1997 publication date.

Defendants' contentions are based upon information available to it at the time of serving these contentions. In the absence of a claim construction order from the Court, Defendants have based the invalidity contentions on the broadest reasonable interpretation of the claim language itself[1] or the meaning ascribed to the claim by Plaintiff in its infringement contentions (which in some instances is broader). Defendants' disclosures do not reflect, and nothing in these disclosures should be construed as reflecting, Defendants' endorsement or assertion of any particular claim construction. Defendants reserve the right to propose alternative claim constructions and to challenge claim constructions offered by Plaintiff.

In the following claim charts, Defendants have cited representative portions of the identified reference, even where the cited reference may contain additional support for a particular claim element. Persons of ordinary skill in the art would have known to read references as a whole, and in the context of other publications and literature and the knowledge of one of ordinary skill in the art. Defendants may rely on all such information, including uncited portions of the prior art references listed herein and on other publications and testimony to provide context and as aids to understanding and interpreting the listed references. Furthermore, Defendant may rely on all such information to establish that a person of ordinary skill in the art would have been motivated to modify or combine any of the cited references so as to render the claims obvious. Additionally, citations to a particular figure in a prior art reference encompass all text relating to the figure, and citations to text encompass all figures relating to that text.

[1] *See*, *e.g.*, MPEP § 2111 (8th ed., 8th rev. 2010).

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| Mark | '073 Claim Limitation | Invalidity Analysis |
|---|---|---|
| *2* | **A multiple access communications system for use in a satellite communication network, comprising:** | Anderlind discloses a multiple access communications system for use in a satellite communication network. For example,<br><br>Viewing Anderlind as a whole and in view of other prior art, this element would have been inherent or obvious to one of ordinary skill in the art. To the extent it is found that the element is not expressly disclosed in Anderlind, Anderlind renders it obvious, either alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with other prior art references identified in the cover pleading or herein. |
| *2a* | **a plurality of user terminals for generating data to be transmitted over said multiple access communication system;** | Anderlind discloses a plurality of user terminals for generating data to be transmitted over said multiple access communication system. For example,<br><br>"Simultaneous service to several terminals is possible due to segmentation of the resource into unit channels, or by imposing limits on the maximum time a terminal may continuously transmit."<br>[Anderlind: page 5].<br><br>"The most widespread wireless systems are the broadcasting networks used for distributing radio and television. In these networks the information flow is uni-directional, from a few high power transmitters to a mass of receivers. In this work we will focus on bi-directional wireless access systems, similar in structure to mobile telephony."<br>[Anderlind: Section 1.1, page 2].<br><br>Viewing Anderlind as a whole and in view of other prior art, this element would have been inherent or obvious to one of ordinary skill in the art. To the extent it is found that the element is not expressly disclosed in Anderlind, Anderlind renders it obvious, either alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with other prior art references identified in the cover pleading or herein. |
| *2b* | **at least one hub for receiving data over** | Anderlind discloses at least one hub for receiving data over said multiple |

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| Mark | '073 Claim Limitation | Invalidity Analysis |
|---|---|---|
| | **said multiple access communication system from said plurality of user terminals;** | access communication system from said plurality of user terminals. For example,<br><br>"The most widespread wireless systems are the broadcasting networks used for distributing radio and television. In these networks the information flow is uni-directional, from a few high power transmitters to a mass of receivers. In this work we will focus on bi-directional wireless access systems, similar in structure to mobile telephony."<br>[Anderlind: Section 1.1, page 2].<br><br>Viewing Anderlind as a whole and in view of other prior art, this element would have been inherent or obvious to one of ordinary skill in the art. To the extent it is found that the element is not expressly disclosed in Anderlind, Anderlind renders it obvious, either alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with other prior art references identified in the cover pleading or herein. |
| *2c* | **transmitter means within each user terminal for receiving data to be transmitted from said user terminal to said hub,** | Anderlind discloses a transmitter means within each user terminal for receiving data to be transmitted from said user terminal to said hub.<br><br>The structures that perform this function are described below.<br><br>For example,<br><br>"The most widespread wireless systems are the broadcasting networks used for distributing radio and television. In these networks the information flow is uni-directional, from a few high power transmitters to a mass of receivers. In this work we will focus on bi-directional wireless access systems, similar in structure to mobile telephony."<br>[Anderlind: Section 1.1, page 2].<br><br>"Random access protocols such as ALOHA or CSMA [115] stipulate rules for when a terminal may transmit, for how long, and what action to take when |

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| Mark | '073 Claim Limitation | Invalidity Analysis |
|---|---|---|
| | | another simultaneous transmission is detected."<br>[Anderlind: page 5].<br><br>"Random access protocols are very useful when transmissions are unpredictable. Contention free access protocols, such as TDMA and CDMA, assign a unit channel to a specific communicating pair. It then has sole right to use this channel. If the required number of unit channels is too high, service is blocked for some terminals."<br>[Anderlind: page 5].<br><br>Viewing Anderlind as a whole and in view of other prior art, this element would have been inherent or obvious to one of ordinary skill in the art. To the extent it is found that the element is not expressly disclosed in Anderlind, Anderlind renders it obvious, either alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with other prior art references identified in the cover pleading or herein. |
| *2d* | **said transmitter means including first communication means for transmitting short bursty data in combination with a second communications means for continuous transmission of data;** | Viewing Anderlind as a whole and in view of other prior art, this element would have been inherent or obvious to one of ordinary skill in the art. To the extent it is found that the element is not expressly disclosed in Anderlind, Anderlind renders it obvious, either alone, in combination with the knowledge of a person of ordinary skill in the art, and/or in combination with other prior art references identified in the cover pleading or herein. |
| *2e* | **switching means coupled to said transmitter means for switching transmission between said first communication means and said second communication means in accordance with predefined criteria, and** | Anderlind discloses a switching means coupled to said transmitter means for switching transmission between said first communication means and said second communication means in accordance with predefined criteria.<br><br>The structures that perform this function are described below.<br><br>For example,<br><br>"The difference between variable and available bit rate is that the first accommodates any fluctuations (within some limits) in the source rate, while |

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