## III. Issues Related to Standardization Leading to Litigation

## A. Patent Ambush as an Abuse of a Dominant Position

As it has been stated before, standard-setting through the SSOs is regarded as having particular advantages, such as, 'offering a collective process of innovation, in which all the market participants are able to take part'.<sup>54</sup> Such *de jure* standardization provides the interested market players with the opportunity to discuss the technological problems that are needed to be solved, as well as the positive and negative aspects of every possible solution.<sup>55</sup> In the situation of standard-setting the technology that is protected by a patent, becomes a commodity, which is indispensable for entering the product market<sup>56</sup>. Such situation may result in issues related to distortion of competition, in particular, abuse of dominant position under Art. 102 TFEU in the form of 'patent ambush'.

In general, patent ambush occurs when a company, which is a member of an SSO and is participating in the standardization process, hides the fact that it holds essential IPRs over specific aspects of the standard, which is being developed.<sup>57</sup> In those situations, where the standard is covered by IPRs and no competing standards are available, the patent holder is able to acquire market dominant position and, after the standard is set, may assert its IPRs and demand excessive royalties in relation to its patent.<sup>58</sup> Such a situation, which begins from the deceptive conduct of the owner of SEPs during the standardization, is highly connected to the essential IPR's disclosure rules of the SSOs.

In perfect circumstances, SSOs would mandate that all participants thoroughly investigate their patent portfolios and disclose all the patents as

<sup>54</sup> Drexl (n 11) 210, 216.

<sup>55</sup> ibid 216.

<sup>56</sup> ibid 213.

<sup>57</sup> Alison Jones, Brenda Sufrin, EU Competition Law: Text, Cases and Materials (OUP 2011) 758.

<sup>58</sup> Eliza G Petritsi "The case of Unilateral Patent Ambush under EC Competition Rules' [2005] 28/1 World Competition 25, 26.

well as pending applications that cover the standard technologies.<sup>59</sup> However, in reality the thorough search of the IPR portfolio is very costly and time consuming and the enforceability of such obligations is hardly possible. Therefore, some members of the SSOs may engage in deceptive conduct by non-disclosing SEPs that they own. This, later, may lead to an infringement of the Art. 102 TFEU.

SSOs usually are not homogenous in terms of their membership and these organizations usually consist of different types of members, whose interests are not necessarily the same. Generally, three different groups of SSOs' members can be distinguished: (i) vertically integrated firms that engage in the development of standardised technology and the implementation of the said technology in products; (ii) firms that engage only in manufacturing and selling in the downstream product market; and (iii) firms that engage exclusively in the development of technology and then sell that technology to manufacturers by licensing their patents.<sup>60</sup> The latter group of the companies, the so-called pure technology developers, 'are characterised by a very specific incentive structure that may lead to a patent ambush<sup>,61</sup>. This type of firms usually are not keep on keeping the prices for licenses low and are likely to act against bona fide requirements by acquiring patents on the future standards without informing other SSO members and, later, charge excessive royalty fees for the use of the standard 62

Patent ambush usually consists of two steps. Firstly, a firm, which is participating in standardization process, works out the features of the standard but does not disclose any patents or pending patent applications, which might be relevant for the upcoming standard. In other words, the company deliberately decides not to disclose its IPRs and this way not to reduce the possibility for its technology to become a standard. Once the standard is adopted, the company performs the second step: sues everybody who uses

<sup>59</sup> Joseph Farrel, John Hayes, Carl Shapiro and Theresa Sullivan "Standard Setting, Patents, and Hold-Up: A Troublesome Mix" [2007] 74 Antitrust Law Journal 603, 603.

<sup>60</sup> Drexl (n 11) 217.

<sup>61</sup> Drexl (n 11) 217.

<sup>62</sup> Drexl (n 11) 217-218.

the afore-specified standard, unless the defendants agree to pay excessive royalty rates.  $^{63}$ 

The competitors, who are using the standard, to which an entire industry has become economically committed, or locked in,<sup>64</sup> by the time when they get sued, have already made substantial investments in implementing this standard technology, and most likely will agree to pay excessive royalties to use it further. Such situation distorts competition and, according to Art. 102 TFEU, may constitute an abuse of dominant position in the market.

An example, of a patent ambush is the *Rambus* case<sup>65</sup>, which could be regarded as a ground-breaking event that encouraged a deeper analysis of the interrelation between competition law, standardization, and IPRs. In this case, which was investigated by the Commission between 2005 and 2009, Rambus, a technology company based in the United States of America participated in a standard-setting process conducted by Joint Electron Device Engineering Council (JEDEC) for computer chips and did not disclose relevant IPRs. At the time when JEDEC was adopting the standard for Dynamic Random Access Memory (DRAM), Rambus was a member of this SSO. However, after this standard was adopted, the company left JEDEC. When DRAM standard became generally accepted by the industry in 1999, Rambus began enforcing its patents against companies using DRAM technology and claimed high royalty rates. This raised the question whether such actions of Rambus are legitimate.

After conducting the investigation of the afore-specified circumstances, Commission sent Rambus a Statement of Objections indicating that the latter allegedly abused its dominant position, i.e. infringed the Art. 102 TFEU, by failing to disclose relevant IPRs during the standardization process and later claiming unreasonable licensing royalties.<sup>66</sup> According to the preliminary view of the Commission, if Rambus had not disguised its relevant patents, JEDEC could have possibly used another technology and

<sup>63</sup> Andreas Fuchs 'Patent Ambush Strategies and Art. 102 TFEU' in Josef Drexl, Warren S. Grimes, Clifford A. Jones (eds), *More Common Ground for International Competition Law*? (Edward Elgar Publishing 2011) 177, 179.

<sup>64</sup> Tallman (n 15) 36.

<sup>65</sup> *Rambus* (Case COMP/38.636) Commission Decision COMP/38.636 [2009] OJ 2010 C30/17.

<sup>66</sup> Commission, Press Release 'Commission confirms sending a Statement of Objections to Rambus' MEMO/07/330.

Rambus would have not been able to negotiate similar high licence fees.<sup>67</sup> In response to the afore-specified Statement of Objections, Rambus proposed commitments addressing the competition law issues raised by the Commission.<sup>68</sup>

After analysing the proposed commitments and investigating the circumstances, in its decision as of 9 December 2009 the Commission considered that Rambus while being a member of JEDEC between 1991 and 1996 was well informed about the events taking place in the afore-specified SSO and the expectations of its other members.<sup>69</sup> Thus, the Commission stated: 'Rambus may have engaged in intentional deceptive conduct in the context of standard-setting process by not disclosing the existence of the patents and patent applications which it later claimed were relevant to the standard.<sup>70</sup> The Commission took the preliminary view that Rambus has been abusing its dominant position by claiming royalties for the use of its patents from JEDEC-compliant DRAM manufacturers at a level which, absent its allegedly intentional deceptive conduct, it would have not been able to charge.<sup>71</sup> In addition, in this decision it was also provisionally stated, that with regard to Rambus's possible intentional breach of the JEDEC's IPR policy and the duty of good faith, claiming the aforespecified royalties would have been incompatible with Art. 102 TFEU.<sup>72</sup> Although Commission preliminary found Rambus's behaviour to be abusive, i.e. excessive pricing, the case did not end with Commission fining Rambus. Eventually the Commission adopted a so-called 'Art. 9 settlement' decision whereby it held legally binding the commitments offered by Rambus, that, in particular, limited the licensing fees that Rambus could charge for certain patents that are essential to JEDEC's standard.<sup>73</sup> One of the reasons why a commitment decision was used in this case, could be the difficult application of the Art. 102 TFEU to patent ambush situations. In the light of the current EU competition law it is not easy to qualify patent ambush as an abuse of dominant position. The deceptive conduct, which has been performed by Rambus during the standardization

69 Rambus (n 65) para 41.

<sup>67</sup> ibid.

<sup>68</sup> Proposed Commitment of Rambus Inc. Case C-3/38.636 (8 June 2009) <a href="http://ec.europa.eu/competition/antitrust/cases/dec\_docs/38636/38636\_1003\_5">http://ec.europa.eu/competition/antitrust/cases/dec\_docs/38636/38636\_1003\_5</a>. pdf> accessed 11 March 2014.

<sup>70</sup> *Rambus* (n 65) para 26.

<sup>71</sup> *Rambus* (n 65) para 28.

<sup>72</sup> *Rambus* (n 65) para 28.

<sup>73</sup> Sattler (n 10) 347.

proceedings, is able to fall under Art. 102 TFEU only when a firm is in a dominant position. Thus, this provision does not seem directly suitable for tackling the manipulations that arise during the standardization process, at least while an IPR owner deliberately not disclosing its IPRs is not in a dominant position.<sup>74</sup> At the moment of non-disclosing the relevant patents, Rambus was not in the afore-specified position. For this reason, in the Statement of Objections the Commission alleged, that Rambus was involved not in exclusionary, but in exploitative practices, i.e. was requesting excessively high royalty rates, that were not related to the economic value of the product supplied.<sup>75</sup>

Due to the requirement of dominant position for the application of Art. 102 TFEU, this was the only option trying to hold Rambus liable. Indeed, at the time of non-disclosing patents, Rambus did not have a market dominant position, thus, Rambus's deceptive conduct during Standardization did not qualify as an abuse. For this reason, the Commission had to focus on the excessive royalty rates as an abuse of dominant position.<sup>76</sup> However, the Commission mentioned that the deceptive conduct of Rambus during the standard-setting, is the reason for such intervention to regulate royalty rates.<sup>77</sup> This shows that the Commission had to use the available EU competition law instruments quite creatively, in order to address such a standardization-related issue.

Taking into consideration the case specified-above, it is possible to conclude, that, in order to prevent legal issues in the post-standardization stage, actions should be taken already in the procedure of standard-setting. Therefore, there are proposals regarding the amendment of the SSO IPR policies, in particular, by introducing *ex ante* disclosure of licensing terms. The question, whether it is useful to implement them, will be discussed in the following chapters of this work (part IV.A).

<sup>74</sup> Fuchs (n 63) 181.

<sup>75</sup> Case 27/76 United Brands v Commission [1978] ECR 207, para 250. The author of this work is aware, that the price control by the competition authorities is a complex issue, however, due to the length of this work, this problem will not be further elaborated.

<sup>76</sup> Thomas De Meese "European Commission Accepts Commitments from Rambus in 'Patent Ambush' Case' [2010] 1 (3) Journal of European Competition Law and Practice 215, 216.

<sup>77</sup> *Rambus* (n 65) paras 28-29.

## B. Injunctive Relief in the Light of FRAND Commitment

Besides the afore-specified situation related to the abuse of the procedure of standardization, the question, whether an attempt by a FRAND-encumbered SEP owner to claim injunctive relief constitutes an abuse of dominant position under Art. 102 TFEU also remains unclear. Generally, the right to exclude and the right to seek and obtain an injunction against an infringer are regarded to be essential rights of IPR holder designed to protect its incentive to innovate and to deter infringements of its exclusive rights.<sup>78</sup> However, there are voices stating, that FRAND commitments should be interpreted as limiting the right of FRAND-committed SEP owners to seek injunctive relief against the users of SEPs.<sup>79</sup>

Lacking clear guidance from the EU institutions on the afore-specified issue, for some time, national courts of EU member states were left to make their own decisions, which were varying. In FRAND-related litigation cases, the District Court of The Hague refused to apply injunctive relief and prevent Apple's sales of iPhones and iPads in the Netherlands,<sup>80</sup> because, according to the court, seeking such an injunction would breach the FRAND obligation and would constitute an abuse of power or breach of pre-contractual good faith.<sup>81</sup> The courts have acted similarly in Italy and France in the cases *IPCom v. Nokia*<sup>82</sup>, and also the High Court of England and Wales in the proceedings between the afore-specified parties rejected the claims for an injunctive relief in the United Kingdom<sup>83</sup>.

However, in Germany it have been held, that German law requires the grant of an injunction to a patent holder, whose patent is found to have been infringed, unless specific circumstances occur.<sup>84</sup> An exception to such a situation was the *Orange Book Standard*<sup>85</sup> case, where the German Federal Supreme Court held, that claim of an injunction, even absent of

<sup>78</sup> Jones (n 57) 17.

<sup>79</sup> Michael Fröhlich "The smartphone patent wars saga: availability of injunctive relief for standard essential patents" [2014] 9 (2) Journal of Intellectual Property Law and Practice 156, 156.

Samsung Electronics Co. Ltd/Apple Inc. D.C. Hague March 14 2012 Dkt. Nos. 400367 / HA ZA 11-2212, 400376 / HA ZA 11-2213, 400385 / HA ZA. 11-2215.
 ibid

<sup>81</sup> ibid.

<sup>82</sup> Jones (n 57) 10.

<sup>83</sup> ibid 10.

<sup>84</sup> Jones (n 57) 11.

<sup>85</sup> BGH, GRUR 2009, 694 – Orange Book Standard.

formal FRAND commitment, constitutes an abuse of dominant position, if the potential licensee made a binding, unconditional offer to conclude a license on terms, which cannot be rejected by the patentee without infringing competition law, and on the condition, that the potential licensee behaves as if licensed. However, in the aftermath of this decision, the FRAND defence succeeded in only few cases before the courts of Germany.<sup>86</sup>

Despite the lack of clarity from the CJEU, specific movements towards more answers to such a complicated situation are, nevertheless, visible. In 2014, two decisions were adopted by the Commission in *Samsung*<sup>87</sup> and *Motorola*<sup>88</sup> cases regarding the availability of injunctive relief on the user of SEPs. In the afore-specified decisions the Commission stated, that, although, in general, the IPR holder has the right to claim injunctive relief, in order to protect its IPRs<sup>89</sup>, such a recourse of the SEP owner may be regarded as an abuse of dominant position, where: (i) the SEP owner has voluntarily committed to license its essential patent on FRAND terms and (ii) where the licensee is willing to take a licence on such terms.<sup>90</sup> Concerning the licensee's 'willingness', the Commission stated that it intends for these decisions to provide a 'safe harbour' for all potential licensees of SEPs that submit to the Licensing Framework<sup>91</sup> provided by the commitments.<sup>92</sup>

However, it is claimed, that these decisions do not create a corresponding 'safe harbour' for the SEP holder or a presumption of unwillingness on the licensee's part<sup>93</sup>: 'A potential licensee can also choose not to sign up to the Licensing Framework. In such a case, the potential licensee cannot be automatically regarded as unwilling to enter into a licence agreement on

<sup>86</sup> Fröhlich (n 78) 158.

<sup>87</sup> Samsung Enforcement of UMTS standard essential patents (Case AT.39939) Commission Decision AT.39939 [2014].

<sup>88</sup> *Motorola - Enforcement of GPRS standard essential patents* (Case AT.39985) Commission Decision AT.39985 [2014].

<sup>89</sup> Motorola (n 86), para 492.

<sup>90</sup> ibid paras 492-495; Samsung (n 85), para 65-69.

<sup>91</sup> According to Samsung decision, Licencing Framework is a certain licensing framework for the determination of FRAND terms and conditions (*Samsung* para 77).

<sup>92</sup> Samsung (n 85), para 122.

<sup>93</sup> Miguel Rato, European Union (Global Competition Review, 28 May 2014) <a href="http://globalcompetitionreview.com/know-how/topics/80/jurisdictions/10/european-union/">http://globalcompetitionreview.com/know-how/topics/80/jurisdictions/10/european-union/</a>> accessed 12 August 2014.

FRAND terms and conditions.<sup>94</sup> The Commission claims, that in such a situation, the dispute resolution body while granting the injunction will need to evaluate all the circumstances and decide whether the licensee is willing to enter into a license agreement on FRAND terms.<sup>95</sup> Therefore, legal uncertainty remains for SEP owners seeking to enforce their rights against implementers who do not agree to a licensing framework advanced by the decision in the *Samsung* case.<sup>96</sup>

The afore-specified cases reveal a different approach of the Commission from the EU case law regarding the fundamental right of access to the courts and the right to an effective remedy. In particular, in the case *ITT Promedia*<sup>97</sup>, which later was confirmed by the case *Protégé Internation-al*<sup>98</sup>, it was provided, that bringing legal proceedings may only be qualified as an abuse of dominance in 'wholly exceptional circumstances'<sup>99</sup>. However, with regard to the *Samsung* and *Motorola* decisions, it is possible to claim, that this time the Commission has applied a lower standard than in the *ITT Promedia* case while deciding that the seeking of an injunction in SEP and FRAND-related cases, where there is a willing licensee, constitutes an abuse of dominant position.

With regard to all the specified above, it is possible to claim, that now there seems to be a fairly broad consensus that owners of SEPs should abide by their FRAND commitments and refrain from obtaining injunctive relief against willing licensees.<sup>100</sup> In addition, the CJEU in *Huawei* case will verify, whether the EU competition law supports the afore-described approach of the Commission.<sup>101</sup>

With regard to all the specified above, it is possible to claim, that EU competition law is shifting towards the idea, that an application for an in-

<sup>94</sup> Samsung (n 85), para 123.

<sup>95</sup> ibid, para 123.

<sup>96</sup> ibid, para 123.

<sup>97</sup> T-111/96 ITT Promedia v Commission [1998] ECR II-02937.

<sup>98</sup> T-119/09 Protégé International v Commission [2012] ECR II-0000.

<sup>99</sup> ITT Promedia (n 95), para 60.

<sup>100</sup> Jonathan Kanter, 'What a Difference a Year Makes: and Emerging Consensus on the Treatment of Standard-Essential Patents' (*CPI Antitrust Chronicle*, 15 October 2013) <a href="https://www.competitionpolicyinternational.com/what-a-difference-ayear-makes-an-emerging-consensus-on-the-treatment-of-standard-essentialpatents/> accessed 19 August 2014.</a>

<sup>101</sup> Request for a preliminary ruling from the Landgericht Düsseldorf C-170/13 Huawei Technologies Co. Ltd v ZTE Corp., ZTE Deutschland GmbH.

junctive relief in SEP-related litigation, may constitute an abuse of a dominant position, at least, in the circumstances, where the licensee is willing to obtain a license from the FRAND-encumbered SEP owner. Such approach raises the importance of FRAND commitment, which is a very broad legal concept, and depends on the evaluation of all the circumstances of each case.<sup>102</sup>

The afore-specified approach, reveals an attempt to keep the balance between the FRAND-committed SEP owners and the implementers in the context of claiming a preliminary injunction. However, still it does not provide with a clear benchmark on the availability of the injunctive relief in SEP and FRAND-related disputes, because it does not provide with any further guidance as to what exactly makes the implementer a willing licensee with regard to the SEP owner,<sup>103</sup> and, of course, relies on the abstract concept of FRAND.

In addition, it is possible to claim, that such a position regarding the availability of injunctive relief arises from the differences between the regular patents and SEPs. Regular patent confers monopoly power on its owner with regard to specific technology, whereas, standardization and implementation of the standard into a specific industry, is able to turn this monopoly over a specific technology into a dominant position over the whole market, and that could lead to restraints of undistorted competition. For this reason, there should be only special circumstances, when an injunction based on SEPs can be justifiable and this calls for balancing the rights of the owners and users of SEPs while taking into consideration the patent law and competition law policies.

With regard to that, the incentives-balance approach, which has been proposed in legal literature<sup>104</sup> may be appropriate for the evaluation of the afore-specified situations. This approach in the context of an injunctive relief in SEP and FRAND-related disputes would point out that while considering the availability of the injunctive relief in such circumstances, the court or any other dispute resolution body would need to balance the proinnovation incentives of patent protection, which generally involve the ability of the patent owner to prohibit third parties from using its patent, with the anti-innovation incentives that would emerge, if the injunctive

<sup>102</sup> Samsung (n 85), paras 122-123.

<sup>103</sup> Alexandros S Zografos "The SEP Holder's Guide to the Antitrust Galaxy: FRAND and Injunctions" [2014] 37 (1) World Competition 53, 55.

<sup>104</sup> Drexl (n 11) 222.

relief to FRAND-encumbered SEPs was allowed. In other words, the follow-on innovation within the standard, which is performed by the users of the SEPs, would be weighted with potential negative incentives for the owner of SEP to invest in innovation if it had no possibility to obtain an injunctive relief for the SEP.<sup>105</sup>

In conclusion, it should be stated, that, due to the importance of the concepts of 'FRAND' and 'willing licensee' in the afore-specified cases, while applying injunctive relief on the implementers or users of SEPs, the decision-making body should be well aware of not only all legal, but also all the technical and commercial aspects of the standard. This proves a need to evaluate specific circumstances in each and every SEP licensing dispute and calls for the establishment of the dispute resolution bodies, which would have not only technical, but also legal and economic expertise. Therefore, a decision of an entity with relevant knowledge and expertise should be regarded as necessary while solving SEP, FRAND and injunctive relief-related disputes.

## C. FRAND Commitment in the Standardization and the Implementation of the Standard

One of the most common requirements imposed on the SEP owners by SSO IPR policies is an obligation to license these essential IPRs on FRAND terms. In general, such commitment is designed to ensure that the essential technology, which is protected by IPRs and incorporated in a standard, would be accessible to the users of that standard and that a balance between the interests of SEP owners and users would be achieved.<sup>106</sup> With regard to the above-described aspects, it is possible to claim, that FRAND concept has gained importance while adjudicating on the licensing conditions in SEP-related cases.

Despite the extensive use of FRAND commitments, no definition explaining the content of this legal category exists. FRAND commitment does not

<sup>105</sup> This approach applied, according to the proposal of Josef Drexl "Intellectual Property in Competition: How to Promote Dynamic Competition as a Goal' in Josef Drexl, Warren S. Grimes, Clifford A. Jones (eds), More Common Ground for International Competition Law? (Edward Elgar Publishing 2011) 210-229.

<sup>106</sup> Claudia Tapia, 'Industrial property rights, technical standards and licensing practices (FRAND) in the telecommunications industry' (DPhil thesis, Augsburg University 2010) 15 (as cited in Goldstein/Kearsey 2004, 26).

specify the licensing terms that must be agreed upon. Rather, it provides that SEP owners will negotiate with each user seeking a SEP license with regard to the commercial conditions specific to their relationship that best reflects 'each party's commercial priorities, with both parties having the duty to so in good faith'.<sup>107</sup>

Despite its positive aims, the concept of FRAND has been criticized stating, that it does not provide SEP users with an access to the technology, which they could effectively implement in the market. It is claimed, that FRAND-based IPR policies are ineffective or inadequate and this threatens the effectiveness of FRAND commitments.<sup>108</sup> In addition, the criteria of how to delimit FRAND are also non-existent and there are still uncertainties while applying an injunctive relief in the context of FRAND commitment.<sup>109</sup>

In addition, the vague language of FRAND concept is regarded as impracticable when a member of SSO tries to negotiate with the SEP owner over the appropriate FRAND licensing terms. Due to the fact, that the SEP holder enjoys broad control over the access of a new industry standard, individual SSO members encounter unreasonably high prices for patent licenses.<sup>110</sup> This usually results in long and complicated litigation before the courts, where the SEP owner alleges patent infringement by requesting injunctive relief, and the potential licensee claims competition law infringement.

In spite of the afore-specified critique towards the concept of FRAND, it should pointed out, that, taking into consideration the complexity of the standardization process, it is not possible to achieve an all-encompassing definition of this concept, because FRAND is not necessarily the same for all companies and for all the SEPs related to one concrete standard.<sup>111</sup> Therefore, while answering what is FRAND, it should always be kept in mind, that the answer is based on factual considerations in many respects.

<sup>107</sup> Larouche, Padilla and Taffnet (n 33) 3.

<sup>108</sup> Larouche, Padilla and Taffnet (n 33) 4 (as cited in: George S. Cary, *et al.*, The Case for Antitrust Law to Police the Patent Holdup Problem in Standard 08Setting, 77, ANTITRUST L.J. 801, 908 (2011); Mark A. Lemley & Carl Shapiro, Patent Holdup and Royalty Stacking, 85 TEX. L. REV. 1991, 1992-93 (2007)).
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<sup>109</sup> Request for a preliminary ruling (n 99).

<sup>110</sup> Patrick D Curran "Standard-Setting Organizations: Patents, Price Fixing, and Per Se Legality" [2003] 70 The University of Chicago Law Review 983, 993.

<sup>111</sup> John Temple Lang "Patent pools and agreements on standards" [2011] 36 (6) European Law Review 887, 892.

The concept of FRAND can be determined only on the basis of case-bycase. Indeed, the FRAND commitment should be regarded as a unified system allowing to determine the licensing terms of SEPs in different fields of technology and in the context of diverse factual and legal situations. In other words, the open-ended terms of FRAND provides the dispute resolution subjects to adapt to a specific situation by maintaining a certain, although abstract, level of legal certainty for the parties at stake. In this context it should be advocated for FRAND-related disputes to be solved by entities, which have not only legal, but also technical and economic knowledge.

In addition, it should be pointed out, that in the context of rapidly developing and complicated technologies, which require individual approach, different types of participants in the standardization process and their diverging interests, the whole standardization system should have at least one common denominator. Still, due to the afore-specified variety in the standardization process, achieving something more detailed than FRAND is hardly possible. With regard to that, the open-endedness of the meaning of FRAND should not be perceived as a drawback. Rather, the absence of a precise definition helps to achieve one of the main aims of the standardization, i.e. to ensure the widest availability of the technology embodied in the standard in the widest possible variety of technical, commercial and legal circumstances.<sup>112</sup>

In conclusion, it is possible to state, that the unrestricted terms of FRAND helps both sides, while determining the licensing terms of SEPs, to adapt to a particular situation but at the same time maintain a specific level of legal certainty. The high level of abstractness of the FRAND concept leads to disputes between the parties, however, taking into consideration the diverging interests of different types of participants in the standard-setting procedures and the complexity of technologies, FRAND should be regarded as the most suitable mean setting the limitations on the licensing conditions of SEPs as well as providing the necessary margin of flexibility.

<sup>112</sup> Geradin and Rato (n 50) 112.